CONSTRUCTION SUBMISSION

NYC Green Schools Rating System

P.S. 49 Queens Addition 63-60 80th St (btw Juniper Blvd S & Penelope) Middle Village, NY 11379 LLW# 089232 Architect: John Ciardullo Associates, P.C. 24 May 2018, **29 June Revision**



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with sa	mple of carting tickets, and signed letter stating total waste material diverted and	method of
diversi	and signed letter stating total waste material diverted and	70
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	R	
Project Ca	ertification Forms	205 265
Design	Team Certification Form Construction Phase	
Contra	roun certification Form Construction Phase	205 270
Contrat		



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NYC Green Schools Rating System 2009

Project: Address Zip Code: LLW #:	P.S. 49 Queens Addition Submission (Check of these Zip Code: 63-60 80th St, Middle Village, NY 11379 Submission D V #: 89232 89232 Submission D Submission D				ne): ate:	SD DD 60% 100% Const					
Design #: Architect:	Beviewer : Providence John Ciardullo P.C. Reviewer Sign Off: Providence			e in GSG) ⁵				If Anticip if Docum Enter <u>poi</u>	ated, or ented: ³ nt value,	ued, ied or if il Credit	
Credit Names	BD&C Reference LEED for Schools 2009	CHPS Reference	NYC GSG 2009	Credit Description and Relevant Information and Drop-Down Menus			Required if Feasible ¹	Optional Credits ²	if Not Fea if Not Pur set 4 c is e 0	Construction Phase of a series Auto Filled: Blank if Pursu No. of Points if Not Pursue Not Feasible or Additional	Auto Filled: Blank if Purs No. of Points if Not Pursu Not Feasible or Additions Not Pursued
Site			31%	of Total Points			P	oints:	13	out of	19
	SS Pr 1		S 1.1R	Construction Activity Pollution Prevention		NP	~	YES	Credit Re	q'd - Con	firm Pursuit
	SS 1	117	S 1.2R	Site Selection		1		VEC	1 Indianta	Durauit	
Site Selection	SS 2	1.1.7	S 1.4	Development Density & Community Connectivity		NP	✓	TES		Pursuit	
	SS 10	1.1.2	S 1.5R	Joint Use of Facilities, Community Access		1	-		1		
	SS Pr 2		S 1.6R	Environmental Site Assessment		NP	>	YES	Credit Re	q'd - Con	firm Pursuit
	SS 3		S 1.7	Brownfield Redevelopment			1			NF	1
	SS 4.1		S 2.1	Alternative Transportation, Public Transportation Access			4		4		
Transportation	SS 4.2		S 2.2	Alternative Transportation, Bicycle Storage & Changing Rooms			1		NF		1
	SS 4.3/4.	.4	S 2.3R	Alternative Transportation, Fuel-Efficient Vehicles/Parking Cap.		2			2		
Minimize Impact on Site	SS 5.1		\$ 3.1	Site Development, Protect or Restore Habitat	RPC	_	1		NE	NF	1
Stormwator Design	55 5.2 55 6 2		53.2	Ster Development, Maximize Open Space			1		NF		1
Heat Island Effect	SS 7 2		S 5 1	Heat Island Effect Roof			1		1		
Outdoor Lighting	SS 8		S 6.1R	light Pollution Reduction					· ·		1
				Site Category Sub-To	tal:	5	14		13	0	6
Water			7%	of Total Points			P	oints:	3	out of	8
Outdawn Oustawns	WE 1.1		W 1.1	Water Efficient Landscaping, Reduce by 50%			2		NF		2
Outdoor Systems	WE 1.1		W 1.2	Water Efficient Landscaping, No Potable Water Use or Irrigation			2		NF		2
	WE Pr 1		W 2.1R	Minimum Water Use Reduction, 20% Reduction	RPC	NP	>	YES	Credit Re	q'd - Con	firm Pursuit
Indoor Systems	WE 3		W 2.2	Enhanced Water Use Reduction, 30% Reduction		2			2		
indeor oystems	WE 3		W 2.3	Enhanced Water Use Reduction, 35% Reduction		1			1		
	WE 3		W 2.4	Enhanced Water Use Reduction, 40% Reduction			1		NF		1
_				Water Category Sub-To	tal:	3	5		3		5
Energy			7%	of Total Points			P	oints:	3	out of	7
Commissioning	EA Pr 1		E 1.1R	Fundamental Commissioning		NP	✓	YES	Credit Re	q'd - Con	firm Pursuit
			E1.2R	Ennanced Commissioning		2		VEC	Ore dit De	ald Car	Z
Refrigerant Management			E2.IK	Fundamental Reingerant Management		NP	~	TES		qa-con	
	EA 4		E 2.2	Measurement & Verification		1	2		INF	1	2
Verification		3.3.5	E 3.2R	Energy Management System Controls. HVAC & H. W. Systems		NP		YES	Indicate	Pursuit	NO
	EA Pr 2		E4.1R	Minimum Energy Performance		NP	1	YES	Credit Re	q'd - Con	firm Pursuit
Energy Efficiency		3.1.2	E4.2R	HVAC System Sizing, Avoid Oversizing		NP	~	YES	Indicate	Pursuit	NO
Power	EA 6		E 5.1R	Green Power		2				2	
				Energy Category Sub-To	tal:	5	2		0	3	4
Materials			10%	of Total Points			P	oints:	4	out of	10
	MR Pr 1		M1.1R	Storage & Collection of Recyclables		NP	>	YES	Credit Re	q'd-Conf	irm Pursuit
	MR 1.1		M1.2	Building Reuse, Maintain 75% of Existing Walls, Floors & Roof	RPC		1			NF	1
	MR 1.1		M1.3	Building Reuse, Maintain 95% of Existing Walls, Floors & Roof			1			NF	1
Efficient Material Use	MR 1.2		M1.4	Building Reuse, Maintain 50% of Interior Non-Structural Elements			1			NF	1
			M16	Construction waste Management, Divert 50% from Disposal		1	-			1	
	MR 2		M 1.7	Construction Waste Management, Divert 75% from Disposal			1				1
	MR 4		M2.1R	Recycled Content 10% (post-consumer + 1/2 pre-consumer)	\square	1	-			4	-
	MR 4		M2.2	Recycled Content, 20% (post-consumer + ½ pre-consumer)			1			NE	1
	MR 5		M2.3	Regional Materials, 10% Extracted. Processed & Manufactured			1			1	-
Sustainable Materials	MR 5		M2.4	Regional Materials, 20% Extracted. Processed & Manufactured			1			NF	1
	-	4.1.1	1 M2.5R Wallboard & Roof Deck Products. Mold Resistance			NP		YES	Indicate	Pursuit	NO
		7.2.3	M2.6R	Low-Mercury Lighting, Reduce Mercury Waste		NP	~	YES	Indicate	Pursuit	NO
See Notes on Page 2 of 2				Materials Category Sub-To	tal:	2	8			4	6

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School Construction Authority NYC Green Schools Rating System 2009

Project:	P.S. 4	9 Quee	ens Add	ition	Submission (Check on	ne):	SD	DD	60%	100%	Const X]
Address Zip Code: LLW #:	p Code: 63-60 80m St, Middle Village, NY 113/9 Submission D 89232				ate:	24	4 May 2018,		, Revised 25 Jun		e 2018	
Design #:	Reviewer :					3) 5				If Anticip	ated. or	
Architect:	John (Ciardu	llo P.C.	Reviewer Sign Off:		GSG				if Docum	ented: 3	or if edit
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	60					cod	cts	-		if Not Fea	sible or	ursu ursu iona
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	1 2			e e e		₽	Re	a R	ð	Ğ	SH	R S S S
Indoor Environmer	ntal Qu	alitv	33%	of Total Points				P	oints:	14	out of	17
	IEQ Pr 1		Q 1.1R	Minimum IAQ Performance			NP	~	YES	Credit Re	q'd - Con	firm Pursuit
IAQ Post-occupancy	IEQ 2		Q 1.1R	Increased Ventilation (included in Q 1.1R credit la	anguage)		1			1		
	IEQ 1		Q 1.2R	Air Flow Stations, Outside Air Intakes			1			1		
	IEQ 3.1		Q 2.1R	Construction IAQ Management Plan, During	Construction		1				1	
	IEQ 3.2		Q 2.2R	Construction IAQ Management Plan, Before	Occupancy		1				1	
	IEQ 4.1		Q 3.1R	Low-Emitting Materials, Adhesives & Sealar	ts ⁴		1				1	
Low-Emitting Materials	IEQ 4.2		Q 3.2R	Low-Emitting Materials, Paints & Coatings 4			1				1	
	IEQ 4.3		Q 3.3R	Low-Emitting Materials, Flooring Systems	Share Developed a 4		1				1	
	IEQ 4.4		Q 3.4R	Low-Emitting Materials, Comp Wood & Agrin			1				1	
Pollution Source Control	IEQ 5	535	Q4.1R	Electric Ignition Stoves			1		VEC	1 Indicato	Burevit	
Foliation Source Control		624	043P	Provide HEPA Vacuums			ND			Indicate	Pursuit	
	IEQ 6.1	0.2.4	Q 5.1R	Controllability of Systems, Lighting			1	v	1123	1		
Controllability of Systems	IEQ 6.2		Q 5.2R	Controllability of Systems, Thermal Comfort			1			1		
Thermal Comfort	IEQ 7.1		Q 6.1R	Thermal Comfort, Comply with ASHRAE 55-	2004		1			1		
	IEQ 8.1		Q 7.1	Daylight & Views, Daylight 75% of Classroon	าร			1		NF		1
	IEQ 8.1		Q 7.2	Daylight & Views, Daylight for 90% of Classro	ooms			1		NF		1
Lighting and Views	IEQ 8.1		Q 7.3	Daylight & Views, Daylight for 75% of Other Spaces				1		NF		1
	IEQ 8.2		Q 7.4	Daylight & Views, Views				1		1		
		5.2.1	Q 7.5	Visual Performance, Artificial Direct-Indirect	Lighting		NP		YES	Indicate	Pursuit	✓ NO
	IEQ Pr 3	5.5.1	Q 8.1R	Minimum Acoustical Performance			NP	>	YES	Credit Re	q'd - Con	firm Pursuit
ACOUSTICS	IEQ 9	004	Q 8.2	Ennanced Acoustical Performance & Sound	tor Special Spaces		1		VEC	1	Dunguit	
		304	Q 0.3	Acoustic Willdows	IEO Category Sub-To	tal:	13	4	TES		Fursuit 6	3
Regional			۵%		RPC Claimed	tai.	15	P	oints [.]	0	out of	4
Regional	RP11		R11	Regionally Defined Credit Achieved	WEc2 (NE/SCA)			1		0	outor	0
	RP 1.2		R1.2	Regionally Defined Credit Achieved	Blank	_		1		0		1
Regionally Appropriate ⁵	RP 1.3		R1.3	Regionally Defined Credit Achieved	Blank	_	_	1		0		1
	RP 1.4		R 1.4	Regionally Defined Credit Achieved	Blank			1		0		1
				Reg	ional Category Sub-To	tal:	0	4	0	0		3
Additional Credits			12%	of Total Points For A 3.1	Use pull-down menu ↓			P	oints:	5	out of	30
	ID 2		A 1.1R	LEED [®] Accredited Professional			1			1		
Innovation in Design	ID 1		A 1.2	Innovation or Exemplory Performance (Ac	tive Design)				1			1
	ID 1		A 1.3	Innovation or Exemplory Performance					1			1
Optional - Site Impact	SS 7.1		A 2.1	Heat Island Effect, Non-Root					1			1
	55 6.1		A 2.2	Stormwater Design, Quantity Control	Evicting 14% 4 pto	RPC	_		1			1
Optional - Energy	EA 1		A 3.1	On-Site Renewable Energy	Approved 0 pts	RPC RPC	_		7	4	0	7
	IEO 4 5		A 4.1	Low-Emitting Materials Euroiture and Eurois	hings ⁴	-			1			1
Optional - IEQ	IEQ 4.6		A 4.2	Low-Emitting Materials, Fulling and Wall Sv	stems ⁴				1			1
Optional - Education	ID 3		A 5.1	The School Building as a Teaching Tool					1			1
				Additional C	Credit Category Sub-To	tal:	1		29	5	0	25
	Letter	prefix i	ndicates	credit section (S, W, E, M, Q, R, A)	Column Tota	als:	29	37	29	29	13	52
First number indicates the category within the section I FED [®] Faulyalant Point Total ⁷ 42 out					out of	95						
SCA Credit Name :		d		the the energies and it within the section estars					•			
	Secon		er indica	ates the specific credit within the section catego	ry							
4	Suffix	'R'' is a	idded for	credits that are required of all projects	a particular project							
1	Project	ts nequ	only nur	sue optional "Additional" section credits with pe	a particular project. rmission from SCA uni	less	s othe	rwise	noted	L		
3	B Durina	GSG s	ubmissi	on phases, enter anticipated design and constru	iction credits, keepina	the	Chec	klist o	curren	t.		
4	A max	imum t	otal valu	e of four (4) points is allowed between these six	low-emitting material c	red	lits (Q	3.1, 3	3.2, 3.	3, 3.4; As	5.1, 5.2)	
5	6 RPC ir	ncentive	e regiona	I credits as indicated. If the referenced credit is	achieved, then the ass	oci	ated F	RPC c	an be	claimed.	, i	
6	This cr	edit red	uires pr	oject-specific energy modeling and can not be a	chieved by use of proto	o-ty	pical r	nodel	ing.	10.10 5		
7	LL86/0	is requi	res Certi	THE LEED® 2009 for Schools or equivalent of a	no-less stringent rating	g sy	stem	- Mini	IMUM	40-49 Pc	ints	

NP: To be consistent with LEED[®], the NYC GSG assigns no point value to credits based on prerequisites or non-LEED[®] credits. NYC GSG: Requires that all credits be attempted and proof through calcuation for those which are not-feasible. NYC GSG: PENDING = Has been reviewed for equivalence to LEED[®] for Schools 2009 through the Mayor's Office of Environmental Coordination.



Credit Compliance Narratives

P.S. 49 Queens Addition	Date: 24 May 2018, Revised 29 June 2018
Address: <u>63-60 80th, Middle Village, NY 11379</u>	Architect: John Ciardullo, P.C.
LLW #: <u>089232</u>	Submission: Construction
Design #:	Reviewer:
	Reviewer Sign Off:

Site Credits

Site Selection S 1.1R Construction Activity Pollution Prevention

SCA GSG committee indicated, in 22Jun2018 meeting minutes, that credit documented.

Due to the fact that the site discharges to a combined city sewer, a NYS DEC SPDES General Permit (GP-0-10-001) and preparation of a Storm Sewer Pollution Prevention Plan (SWPPP) is not required. However, as a Best Management Practice (BMP), a Soil Erosion and Sediment Control Plan have been prepared and included in the Contract Documents. The total renovated project site area is 23,390 sf including renovated sidewalks but not existing building or existing sidewalks.

This Soil Erosion and Sediment Control Plan has been provided on drawing A041 to satisfy the requirements of the SCA's NYC Green School Guide. The plan involves notes, descriptions, and details (drawing A050) of the necessary controls. A plan has been developed for the specific scheme chosen. Silt fencing, storm drain inlet protection, protection of existing vegetation, and a temporary stabilized construction entrance is indicated for this project.

In addition to implementing the Erosion and Sediment Control Plan the Contractor, Darcon Construction Inc provided a dust control plan that covers the exterior environment of the building; an additional dust control plan was provided by the construction contractor, EW Howell, for the interior of the building. Refer to Appendix A for the dust control plan and documentation of erosion & sediment control implementation, and Appendix B for the Construction Phase Certification form.

S 1.2R Site Selection

SCA GSG committee indicated credit as anticipated at the 16 September 2014 meeting.

Credit was documented and accepted during Design Phase submissions and there is no documentation that requires an update.

<u>S 1.3</u> Sustainable Site & Building Layout

SCA GSG committee indicated credit as anticipated at the 16 September 2014 meeting.

Credit was documented and accepted during Design Phase submissions and there is no documentation that requires an update.

S 1.4 Development Density & Community Connectivity

SCA GSG committee indicated credit as anticipated at the 16 September 2014 meeting.

Credit was documented and accepted during Design Phase submissions and there is no documentation that requires an update.

S 1.5R Joint Use of Facilities, Community Access

SCA GSG committee indicated credit as anticipated at the 16 September 2014 and 12 March 2015 meetings.

Credit was documented and accepted during Design Phase submissions and there is no documentation that requires an update.

S 1.6R Site Assessment

SCA GSG committee indicated credit as anticipated at the 16 September 2014 and 12 March 2015 meetings.

A Phase I Environmental Site Assessment (ESA) was performed by GZA GeioEnvironmental of New York on 24 November 2013. The Phase I ESA identified no on-site Recognized Environmental Conditions (RECs) or Vapor Encroachment Conditions (VECs), but has identified off-site RECs in proximity to the site that included two dry cleaners and a historic dry cleaner/rug cleaner, and environmental concerns associated with the potential presence of asbestos containing material (ACM), interior and exterior lead-based paint (LBP) and polychlorinated biphenyls (PCBs)-containing light ballasts and caulking material. A Phase II ESI was recommended to determine whether the identified RECs and VECs have affected the site subsurface.

Please see the following Executive Summary from the Phase I ESA report:

1.0 EXECUTIVE SUMMARY

At the request of the Industrial and Environmental Hygiene (IEH) Division of the New York City School Construction Authority (NYCSCA), GZA GeoEnvironmental of New York (GZA) conducted a Phase I Environmental Site Assessment (ESA) of the proposed second addition to Primary School (P.S.) 49 (hereafter referred to as the "Site"). The NYCSCA is proposing to construct a 20,000 gross square feet (SF) addition to existing P.S. 49 located at 63-60 80th Street in Middle Village, New York (Borough of Queens Block 2990, Lot 45). The Site area is primarily characterized by residential, recreational and institutional use.

As indicated in the NYCSCA Test Fit/Sketch Study dated November 26, 2013, the Site is situated on an approximately 5,000-SF portion of the property, located in the northwest corner of the P.S. 49 school property and adjoining the recent addition to the P.S. 49 building to the west. The Site is currently occupied by a school yard consisting of a grassy area and an open paved play area. The adjoining properties are P.S. 49 (main school building and addition) to the east and south, residences, and a public park. The Site can be accessed from Penelope Avenue and the main school building's primary entrance is on Juniper Boulevard South. P.S. 49 is an active public school located on an approximately 59,030-SF lot and is a three-story building with a partial basement that was constructed in the 1930s with an addition built in 2007.

The main objective of the Phase I ESA is to identify recognized environmental conditions (RECs) and environmental concerns that may affect the suitability of the Site for use as a school. RECs are defined in American Society of Testing and Materials (ASTM) Standard Practice E 1527-13 as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property. Note that controlled recognized environmental conditions (CRECs) are considered to be RECs and are listed in the Executive Summary and Conclusions of this Phase I ESA. Additionally, vapor encroachment conditions (VECs) were evaluated as per ASTM E 2600-10.

Other environmental issues and conditions that, in the opinion of the *environmental professional* conducting the assessment, would not be considered *RECs* are identified in this assessment. These may include *historical RECs, and/or de minimis* conditions. The Phase I ESA also includes a preliminary evaluation of specific potential environmental issues or conditions that are, according to ASTM E 1527-13, considered non-scope considerations. These issues include radon, asbestos-containing material (ACM), polychlorinated biphenyl (PCB) -containing light ballasts and caulking materials, exterior lead-based paint (LBP), chemical storage, wetlands, regulatory compliance issues, dry cleaner and other industrial emissions, mold, biological agents, electromagnetic fields, and methane. The Phase I ESA included a review of federal, state, and local records, previous reports (if available) and historical documents; visual observation of the Site and adjoining properties; and interviews with selected Site representatives.

The assessment requested by the NYCSCA is intended to identify conditions that would have the potential to impact the value of the Site or the development and use of the Site as a public school facility. The assessment was also conducted for purposes of environmental due diligence in order to qualify for the innocent landowner, a bona fide prospective purchaser or a contiguous property owner defense under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). The Phase I ESA included evaluation of the following: current and historical Site usage; current and historical usage of adjoining properties; regulatory agency records review; on-site solid waste management and disposal practices; on-site hazardous materials and petroleum products management; chemical storage, ACM, PCBs and exterior LBP management; wetlands; regulatory compliance issues; dry cleaner and other

industrial emissions; radon; mold and moisture intrusion; biological agents; electromagnetic fields; and potential for methane generating materials.

Summary of RECs, Vapor Encroachment Concerns (VECs) and Environmental Concerns

This Phase I ESA has revealed the following RECs and/or VECs associated with the Site:

On-Site RECs/VECs:

None.

Off-Site RECs/VECs:

 Two confirmed dry cleaners and a historic dry cleaner/rug cleaner located downgradient/crossgradient of the Site and within 1/3 of a mile of the Site.

This Phase I ESA has revealed the following environmental concerns associated with the Site:

- Suspect ACM may be present and this is considered an environmental concern.
- Fluorescent light fixtures were observed throughout the adjacent Site building during the Site inspection. The fluorescent light ballasts may contain PCBs. The potential presence of PCBcontaining ballasts is considered an environmental concern.
- PCB-containing caulking may be present. The potential presence of PCB-containing caulking is considered an environmental concern.
- The painted surfaces may contain lead and LBP is considered an environmental concern. Additionally, the presence of damaged suspect LBP is also considered an environmental concern.

Recommendations

Based on the findings of the Phase I ESA, GZA recommends that a Phase II Environmental Site Investigation be performed at the Site, which includes subsurface soil and soil gas samples, to evaluate whether the identified RECs/VECs have affected the suitability of the Site for use as a public school facility.

Since partial demolition of the existing school addition will take place during construction of the new addition, GZA also recommends that any ACM, LBP and PCB-containing light ballasts and window caulk affected by future demolition at the Site be identified and properly managed during such activities.

A Phase II Environmental Site Assessment (ESA) was performed by GZA GeioEnvironmental of New York on 15 & 19 January 2014.

Please see the following Executive summary from the Phase II Environmental Site Investigation Report:

EXECUTIVE SUMMARY

At the request of the New York City School Construction Authority (NYCSCA), GZA GeoEnvironmental of New York (GZA) conducted a Phase II Environmental Site Investigation (ESI) at the area designated as the location of a proposed second addition to Primary School (P.S.) 49 (hereafter referred to as the "Site"). The Site is located at 63-60 80th Street in Middle Village, New York (Borough of Queens Block 2290 and Lot 45) in an area that is primarily characterized by residential, recreational and institutional use. The Site is situated on an approximately 5,000-SF portion of the property, located in the northwest corner of the P.S. 49 school property and adjoining the recent addition to the P.S. 49 building to the west. The Site is currently occupied by a school yard consisting of a grassy area and an open paved play area. The adjoining properties are P.S. 49 (main school building and addition) to the east and south, residences, and a public park. The Site can be accessed from Penelope Avenue and the main school building's primary entrance is on Juniper Boulevard South. P.S. 49 is an active public school located on an approximately 59,030-SF lot and is a three-story building with a partial basement that was constructed in the 1930s with an addition built in 2007. Historical use of the Site is primarily play yard for a school and surrounding properties were used for residential, recreational, and institutional purposes.

GZA previously performed a Phase I Environmental Site Assessment (ESA) of the Site for the NYCSCA. The Phase I ESA Report, dated December 26, 2013, identified no on-Site Recognized Environmental Conditions (RECs) or Vapor Encroachment Conditions (VECs). The Phase I ESA Report identified offsite RECs in proximity to the Site that included two dry cleaners and a historic dry cleaner/rug cleaner. Additionally, the Phase I ESA Report identified environmental concerns associated with the potential presence of asbestos containing material (ACM), interior and exterior lead-based paint (LBP) and polychlorinated biphenyls (PCBs)-containing light ballasts and caulking material.

The purpose of the Phase II ESI was twofold: 1) evaluate if the RECs, VECs, and environmental concerns identified in the Phase I ESA Report require special consideration and/or affect the suitability of the Site for use as a public school facility, and 2) preliminarily characterize the environmental condition of the soil anticipated to be excavated for construction of the new school facility. The conclusions and recommendation of this report only apply to the Site as defined as the 5,000 SF footprint of the proposed addition.

The Phase II ESI field activities were performed on January 15, 2014 and January 19, 2014, and consisted of a geophysical survey, the completion of three soil borings and the collection and analysis of three soil samples and three soil vapor samples.

Based on the results of the Phase II ESI, the following can be concluded:

- The geophysical survey did not reveal evidence of utilities or buried structures in the vicinity of the soil borings, or potential underground storage tanks (USTs) on the accessible portions of the Site.
- Soils observed during soil sampling were primarily fine to medium sand, silty sand and silt with
 gravel. Evidence of fill material in the form of brick fragments and concrete was observed in two
 of the three borings on-Site.
- One volatile organic compound (VOC), benzene, was detected in one soil vapor sample at a
 concentration above the range of New York State published background levels. The detection of
 the VOC in soil vapor is related to an off-site source in the surrounding area since there is no

corresponding detection of this compound in soil samples collected on-Site, no historic record of benzene use on-Site, and potential benzene sources have been identified in the surrounding area.

- The metal lead was detected at a concentration above Unrestricted Use Soil Cleanup Objectives (SCOs) in one soil sample and zinc was detected at a concentration above SCOs in a second soil sample. These metals are typically encountered in urban fill material which as was observed at the Site.
- Two pesticide compounds (4,4'-DDT and 4,4'-DDE) were detected in pre-design waste characterization sample at concentrations above Unrestricted Use SCOs. The pesticide exceedances detected are most likely attributed to urban fill or historic use on-Site in this landscaped area.

To address the RECs, VECs, and environmental concerns that require special considerations and/or affect the suitability of the Site for use as a school facility, GZA recommends the following:

- As a standard NYCSCA practice, a soil vapor barrier should be integrated into the new building's design.
- All material excavated during construction activities should be properly characterized and disposed, including collection and analysis of samples required by the contractor-selected disposal facilities.
- After the proposed new building and grounds are constructed, any exposed soil (landscaped areas) should be covered with at least two feet of environmentally clean fill.
- Suspect ACM, LBP, and/or PCB-containing materials should be properly managed during construction or demolition activities for any portions of the work that will come in contact with the existing school, immediately adjacent to the Site.

A description of the recommended engineering controls including a remediation cost estimate is included in Appendix F.

As a standard SCA practice, a soil vapor barrier will be integrated into the new building design as per drawings H201-H202. The project team has also incorporated the specification Section 02200, Earthwork, into the construction documents.

A small amount of remediation was required, but does not meet the requirements to achieve Credit S1.7.

See below for the no remediation required documentation and Appendix B for the Construction Phase Certification form.





October 20, 2017

PS 49Q

63-60 80th Street Middle Village, NY 11379

RE: Green School Guidelines – S1.6R

To whom it may concern,

This letter is to confirm that no brownfield remediation is required for this project.

Thank you,

Melly Recney

Molly Rooney, LEED AP BD+C

EW Howell Assistant Project Manager

CONDITION (CONDITION) 2011 WITH PROVIDED AND CONTRACT ON A CONTRACT OF A

EWHOWELL.COM

S 1.7 Brownfield Redevelopment

SCA GSG committee indicated agreement that the credit is not feasible at the 16 September 2014 and 12 March 2015 meetings.

See Sc1.6R above for the contamination status narrative and executive summary of the Phase II Environmental Site Assessment Report.

As a standard SCA practice, a soil vapor barrier will be integrated into the new building design. The project team has also incorporated the specification Section 02200, Earthwork, into the construction documents on drawings H201 and H202.

See above in S1.6R for the no remediation required documentation and Appendix B for the Construction Phase Certification form.

Transportation

S 2.1 Alternative Transportation, Public Transportation Access

SCA GSG committee indicated credit as anticipated at the 16 September 2014 and 12 March 2015 meetings.

Credit was documented and accepted during Design Phase submissions and there is no documentation that requires an update.

S 2.2 Alternative Transportation, Bicycle Storage & Changing Rooms

GSG committee declares this credit as not pursued at 12 March 2015 meeting as no showers are provided.

Credit was documented and agreed to as not feasible during Design Phase submissions and there is no documentation that requires an update.

S 2.3R Alternative Transportation, Fuel-Efficient Vehicles/Parking

SCA GSG committee indicated credit as anticipated at the 16 September 2014 and 12 March 2015 meetings. Option 1, no new parking, will be pursued.

Credit was documented and accepted during Design Phase submissions and there is no documentation that requires an update.

Minimize Impact on Site

<u>S 3.1</u> Site Development, Protect or Restore Habitat

SCA GSG committee indicated agreement that the credit is not feasible at the 16 September 2014 meeting.

As currently designed, the project will be unable to comply with the requirements of this credit due to constraints of the site area and the desire to maximize the undersized student recreation space. The credit guidelines would require the project to include a minimum of 6,910 sf of native or adapted vegetation which is not possible based on the renovated site program. Currently, the renovated site design contains approximately 2,345 sf of planted area, and does not have a vegetated roof.

Refer to Appendix B for the Construction Phase Certification form.

<u>S 3.2</u> Site Development, Maximize Open Space

In order to comply with this credit, the project must provide vegetated open space equal to at least 20% of the project's site area, excluding the building footprint. Since this project is located in an urban area and will be achieving S1.4, pedestrian-oriented hardscape can contribute to this credit if a minimum of 25% of the open space is vegetated.

This would require an open area of 2,764sf minimum, of which 691sf must be vegetated. The open space (including play yard) and vegetated areas of the following schematic design well exceed the required thresholds, but the proposed vegetation is grass which is not considered native/adaptive and thus this credit is not earned.

Renovated Site Area only (incl. new building addition,		
school yard, proposed sidewalks, proposed permeable		
paving areas & tree pits; does not include existing		Scaled from 60% CD drawings
buildings and sidewalks to remain)	22,308	17Dec2014
		Scaled from 60% CD drawings
Building Footprint Existing (Main Only)	30,151	17Dec2014
		Scaled from 60% CD drawings
Building Footprint Proposed	8,487	17Dec2014
		Existing Building not in renovated
Building Footprint in Renovated Site Area Only	8,487	site area.
Renovated Site Area Minus Building Footprint	13,821	
20% of Site Area (excl. building footprint)	2,764	
25% of 20% Site Area Requiring Vegetation	691	
Renovated Site Area Open Space (Pedestrian & Vegetade	11,475	Verified in 21Aug2014 JCA e-mail.
Green Roof Space	0	Verified in 21Aug2014 JCA e-mail.
Vegetated Area (proposed + existing to be		Scaled from 60% CD drawings
replaced/maintained in renovated site area)	2,345	17Dec2014

Credit was documented as not feasible during Design Phase submissions and there is no documentation that requires an update.

Stormwater Design

S 4.1 Stormwater Management, Quantity Control

SCA GSG committee agreed credit is not feasible at the 12 November 2014 and 12 March 2015 meetings.

The installed system does not comply with this credit.

Credit was documented and agreed to as not feasible during Design Phase submissions and there is no documentation that requires an update.

Heat Island Effect

S 5.1R Heat Island Effect, Roof

SCA GSG committee indicated credit as anticipated at the 12 November 2014 and 12 March 2015 meetings.

78 Hanover Glacier White Pavers with SRI of 85 provided 13Oct2016.

SCA GSG committee agrees this credit is not feasible at the 12 March 2015 meeting.

Credit was documented and agreed to as not feasible during Design Phase submissions and there is no documentation that requires an update.

Water Credits

Outdoor Systems
<u>W 1.1 Water Efficient Landscaping, 50% Reduction</u>

SCA GSG committee agrees this credit is not feasible at the 12 March 2015 meeting.

Credit was documented and agreed to as not feasible during Design Phase submissions and there is no documentation that requires an update.

W 1.2 Water Efficient Landscaping, No Potable Water Use

SCA GSG committee agrees this credit is not feasible at the 12 March 2015 meeting.

Credit was documented and agreed to as not feasible during Design Phase submissions and there is no documentation that requires an update.

Indoor Systems

W 2.1R Minimum Water Use Reduction, 20% Reduction

SCA GSG committee indicated credit as anticipated at the 12 November 2014 and 12 March 2015 meetings.

Credit was documented and accepted during Design Phase submissions and there is no documentation that requires an update.

W 2.2R Water Use Reduction, 30% Reduction

SCA GSG committee indicated credit as anticipated at the 12 November 2014, 12 March 2015, and 21 May 2015 meetings

Credit was documented and accepted during Design Phase submissions and there is no documentation that requires an update.

W 2.3R Water Use Reduction, 35% Reduction

SCA GSG committee indicated credit as anticipated at the 12 November 2014, 12 March 2015, and 21 May 2015 meetings

Credit was documented and accepted during Design Phase submissions and there is no documentation that requires an update.

W 2.4 Water Use Reduction, 40% Reduction

SCA committee agreed that credit is not feasible.

Credit was documented and agreed to as not feasible during Design Phase submissions and there is no documentation that requires an update.

Energy Credits

Commissioning E1.1R Fundamental Commissioning

SCA GSG committee indicated credit as anticipated at the 12 November 2014 and 12 March 2015 meetings.

EME Group is providing fundamental commissioning for the project.

SCA noted in 30Mar2018 GSG Construction Submission seminar not to hold up GSG final submission for commissioning deficiencies.

E1.2R Enhanced Commissioning

SCA GSG committee indicated, in 22Jun2018 meeting minutes that Insufficient information to determine credit documentation. This credit will be documented during the Commissioning Certification meeting. CxE is EME.

Refrigerant Management

E2.1R Fundamental Refrigerant Management

SCA GSG Committee indicated credit as feasible at 12 November 2014 and 12 March 2015 meetings.

Credit was documented and accepted during Design Phase submissions and there is no documentation that requires an update.

E2.2 Enhanced Refrigerant Management

SCA GSG committee agrees credit is not feasible at 12 March 2015 meeting.

Credit was documented and agreed to as not feasible during Design Phase submissions and there is no documentation that requires an update.

Verification

E3.1R Measurement and Verification

SCA GSG committee indicated, in 22Jun2018 meeting minutes that insufficient information to determine credit documentation. Contractor to address all FMSI deficiencies.

The projects approach and documentation for the credit has been provided and approved during design. SCA noted in 30Mar2018 GSG Construction Submission seminar not to hold up GSG final submission for meter deficiencies. SCA

indicated in 25Jun2018 e-mail that consultant shouldn't wait for FMSI deficiencies resolutions to provide GSG-Construction re-submission; this credit is verified prior certification.

Refer to Appendix B for the Construction Phase Certification form verifying required building systems have been implemented and confirmed by the design engineer.

E3.2R Energy Management System – Controls, HVAC, & Hot Water

GSG committee indicated credit as anticipated at 4 June 2015 meeting.

The School Construction Authority used the services of a Facility Management Systems Integrator (FMSI) whose responsibilities where:

- Evaluate the control submissions made by the HVAC contractor's proposed Temperature Controls subcontractor. Systems Integrator will prepare a report if the proposed Temperature Controls Contractor is rejected by the Systems Integrator.
- Supervise the installation of the field level controls by the controls subcontractor.
- Commission the field level controls as installed by the controls subcontractor.
- Provide the Graphic User Interface (GUI) front-end software and provide schematic control graphics according to SCA Standard Details.
- Turn over all software routines, operation manuals and access codes.
- Provide 40 hours of training for the custodial staff in the operation of the control system.
- Connect the project school to the Department of Education Centralized Host Work Station located at the Department of Education Bureau of Supplies Building.

Energy Efficiency E4.1R Minimum Energy Performance

GSG committee indicated credit as anticipated at 4 June 2015 meeting.

The Project's goal is complete compliance with NYC Green Schools Guide (GSG) 2009 which will show compliance with NYC Local Law 86/05. It was determined during GSG-DD discussion that project-specific modeling will be required. EME' energy model is being used in determination of compliance with LL86 and this credit of GSG E4.1 but not to demonstrate compliance with Energy Code.

LL86/05 Reporting Form Construction sheet as follows:

Prototypical Compliance	PS49Q	
Project Name In SEPTS Capital		Managing Agency
Project Record		Internal Project
	Name of Project Phase in	Identification # in SEPTS
	SEPTS Capital Project Record	Capital Project Record
PS49Q	N/A	LLW# 089232

Green Building Rating								
Green Building Rating System Utilized	Has <u>LocalLaw86@</u> <u>cityhall.nyc.gov</u> been invited to view USGBC application?	Cost Attributable to LEED [®] or Green Schools 2009 Compliance						
NYC Green Schools 2009	No	\$117,165						

•

Energy Sources and Utility Rates

Electric Used	Electric Rate Group	Gas for	Gas Rate Group	Gas for Non-	Gas Rate Group	Purchased	# 2 Oil Used
in Project		Heating	for Heating	Heating	for Non-Heating	Steam Used	in Project
Area?		Used in		Used in		in Project	Area?
		Project Area?		Project Area?		Area?	
	NYPA Public		Gas, Firm-				
Yes	Buildings Conv	Yes	Heating.	No		No	No

Is all energy use affected by the work that is	Will the cost of all energy
subject to LL86 requirements metered	use affected by project
independently of other buildings or spaces?	work be paid out of the city
	treasury?
Yes	Yes

Energy Use and Electric Peak Demand										
Electric Use Baseline (Kwh/yr)	Electric Use Design Case (Kwh/yr)	Design Case with Unregulated Loads (Kwh/yr)	Electric Peak Demand Baseline (Kw)	Peak Demand Design Case (Kw)	Peak Demand Design Case with Unregulated Loads (Kw)					
222 777										
333,755	235,592	328,512	231.8	1/2.6	203.3					
From Energy	From Energy	From Energy	From Energy	From Energy	From Energy					
Model dated	Model dated	Model dated	Model dated	Model dated	Model dated					
16June2015	16June2015	16June2015	16June2015	16June2015	16June2015					
Regulated only	Regulated only		Regulated only	Regulated only						
			Highest Month	Highest Month	Highest Month					

Sum of Monthly	Sum of Monthly	Sum of Monthly Peak	Gas Use for	Gas Use for	Gas Use for Heating
Electric Peak	Electric Peak	Demands Design Case	Heating Baseline	Heating Design	Design Case with
Demands	Demands Design	with Unregulated	(therms/yr)	Case (therms/yr)	Unregulated Loads
Baseline (Kw/yr)	Case (Kw/yr)	Loads (Kw/yr)			(therms/yr)
1,664.5	1,231.7	1,600.9	7,636	7,475	13,257
From Energy	From Energy		From Energy	From Energy	
Model dated	Model dated	From Energy Model	Model dated	Model dated	From Energy Model
16June 2015	16June2015	dated 16June2015	16June 2015	16June2015	dated 16June2015
Regulated only	Regulated only		Regulated only	Regulated only	

Gas Use for Non- Heating Baseline	Gas Use for Non- Heating Design Case (therms/yr)	Gas Use for Non- Heating Design Case with Unregulated	Purchased Steam Use Baseline	Purchased Steam Use Design Case	Purchased Steam Use Design Case with Unregulated Loads
(therms/yr)		Loads (therms/yr)	(Mlbs/yr)	(Mlbs/yr)	(Mlbs/yr)
0	0	0	0	0	0
Hot water boiler	Hot water boiler	Hot water boiler is			
is the only gas	is the only gas	the only gas			
load.	load.	load.			

#2 Oil Use	#2 Oil Use	#2 Oil Use	Meth	nodology Required b	y LL86 Rules to Estab	olish Energy Use and	
Baseline	Design Case	Design Case with	Peak	Demand Baseline a	nd Design Case		
(gals/yr)	(gals/yr)	Unregulated					
		Loads (gals/yr)					
0	0	0	ANSI	/ASHRAE/IESNA Star	ndard 90.1-2007, Ene	rgy Cost Budget	
		•					
Potable Water Use Stormwater Run-Off							
Is all potable water u	use in the portion of	Potable Water U	Jse	Potable Water Use	Stormwater Run Off	Stormwater Run Off	
project that is subjee	ct to LL86 requiremen	ts Baseline (gals/y	r)	Design Case (gals/yr)	Baseline (gals/yr)	Design Case (gals/yr)	
metered independe	ntly of other building	s or					
spaces?							
Yes			552,277	348,323	N/A	N/A	
		From W2.1R u	pdated	From W2.1R updated			
		from 21May202	15 mtg.	from 21May2015 mtg.			

LL86/05 Reporting Form Construction-EEM sheet as follows:

								•				
Prototypical	Сс	omplian	ce	Summa	ary	/		PS4 9	9 Q			
Project Name in S	SEP	'TS Capital						Mana	ging Agency			
Project Record								Interr	nal Project			
				Name of	[:] Pre	oject Phase	e in	Identi	ification # in :	SEPTS		
				SEPTS Ca	pit	al Proiect F	Record	Capita	al Proiect Rec	ord		
PS490				N/A	1	,		11\//#	089232			
Energy Efficiency Measu	res f	for LEED® Proje	ect w	ith Constructi	on C	ost of \$12,000,	000 or M	ore (copy	and paste column	is D - J for	each add	litional EEM, as
necessary)	Inc	remental	Red	uction in	Red	luction in Sum	Reducti	on in Gas	Reduction in Gas	Reductio	n in llse	Reduction in the
Measure (EEM)	Co	nstruction	Elec	tric Use from	of N	Aonthly Peak	Used fo	r Heating	Used for Non-	of Purcha	ased	Use of #2 Oil
Description	Co	st of EEM	EEM	1 (Kwh/yr)	Den	nand from	from EE	м	Heating from	Steam fr	om EEM	from EEM
					EEN	1 (Kw/yr)	(therms	/yr)	EEM (therms/yr)	(Mlbs/yr	·)	(gals/yr)
Low Flow Water Fixtures	5	\$724		4,598		24.6		0	0		0	0
				From Energy		From Energy						
				16June2015		16June2015						
Energy Conservation	Incre	emental I	Redu	ction in I	Redu	uction in Sum	Reductio	on in Gas	Reduction in Gas	Reductio	n in Use	Reduction in the
Measure (EEM)	Con	struction I	Electi	ric Use from (Dom Dom	onthly Peak	Used for	Heating	Used for Non-	of Purcha	ased	Use of #2 Oil
Description	Cost		ELIVI	(KWN/Yr) I	Dem FFM	and from	(therms)	/ur)	FEM (therms/vr)	Milbs/vr	om EElvi)	(gals/yr)
Variable Speed Pumps		\$2,014		7,866		14.9	(unenno)	-440	0	(111.05/ 41	0	0
			F	From Energy		From Energy	Fror	n Energy				
			Ν	Vodel dated		Model dated	Mod	el dated				
				16June2015		16June2015	16J	une2015				
Energy Conservation	I	incremental	Re	duction in	Re	duction in Sum	Reduct	ion in Ga	s Reduction in Gas	Reductio	on in Use	Reduction in the
Measure (EEM) Descripti	on (Ele	ectric Use from	n of	Monthly Peak	Used to	or Heating	g Used for Non-	of Purch	ased	Use of #2 Oil
	`	LOST OI EEIVI	EL	.IVI (KWN/yr)	EE	Mana Irom M (Kw/yr)	(therm	ElVI Is/vr)	FFM (therms/vr)	(Mlbs/v	'OM ELIVI r)	from Ecivi (gals/vr)
Premium Efficiency Moto	ors	\$1,1	32	1,20)4	6.	3	-1	0 ()	., 0	0
				From Energ	şy	From Energ	y Fr	om Energ	У			
				Model date	d	Model date	d Mo	odel dateo	d			
				16June201	.5	16June201	5 1	6June201	5			
			Ļ							_		
Energy Conservation	li A	ncremental	Re	duction in	Re	duction in Sum	Reduct	ion in Ga	s Reduction in Gas	Reductio	on in Use	Reduction in the
Description		Cost of FFM	FF	ectric Use from M (Kwh/vr)	n of De	mand from	from F	or Heating FM	g Used for Non-	of Purch Steam fr	ased	from FFM
Description		JOST OF LEN		ivi (ixivii, yi)	EE	M (Kw/yr)	(therm	s/yr)	EEM (therms/yr)	(Mlbs/y	r)	(gals/yr)
Efficient condensing boil	ler	\$10,55	4		0	(0	45	2 (0	0
							Fre	om Energy	У			
							Mo	odel dated	d F			
							1	bjune 201	5			
Energy Conservation Mea	asure	e Incremental	1	Reduction in	1	Reduction in Su	m Redu	ction in G	as Reduction in Ga	s Reducti	on in Use	Reduction in the
(EEM) Description		Construction	1	Electric Use fi	rom	of Monthly Pea	k Used	for Heati	ng Used for Non-	of Purcl	hased	Use of #2 Oil
		COST OF EEIVI		EEIVI (KWN/Yr)	,	FFM (Kw/vr)	trom (ther	EEIVI ms/vr)	FFM (therms/v	Steam 1	rom EEIVI /r)	(gals/yr)
High Efficiency Classroom	1 AH	U \$26	5,870	8	3955	6	5.1		0	0	··) () 0
				From Ene	ergy	From Ene	rgy					
				Model da	ited	Model dat	ed.					
				16June2	2015	16June20)15					

Energy Conservatio	n Measure (EEM)	Incremental	Reduction in	Reduction in Sum	Reduction in Gas	Reduction in Gas	Reduction in Use	Reduction in the
Description		Construction	Electric Use from	of Monthly Peak	Used for Heating	Used for Non-	of Purchased	Use of #2 Oil
		Cost of EEM	EEM (Kwh/yr)	Demand from	from EEM	Heating from	Steam from EEM	from EEM
				EEM (Kw/yr)	(therms/yr)	EEM (therms/yr)	(Mlbs/yr)	(gals/yr)
Improved lighting a	nd controls (incl daylightin	s) \$19,32	4 56,126	225.4	-600	0	(0
			From Energy	From Energy	From Energy			
			Model dated	Model dated	Model dated			
			16June2015	16June2015	16June2015			
Energy	Incremental Re	duction in	Reduction in Su	m Reduction in	n Gas Reductio	n in Gas Reduc	tion in Use Re	duction in the
Conservation	Construction El	ctric Use from	of Monthly Pea	k Used for He	ating Used for	Non- of Pu	chased Us	e of #2 Oil

Conservation	Construction	Electric Use from	of Monthly Peak	Used for Heating	Used for Non-	of Purchased	Use of #2 Oil
Measure (EEM)	Cost of EEM	EEM (Kwh/yr)	Demand from	from EEM	Heating from	Steam from EEM	from EEM
Description			EEM (Kw/yr)	(therms/yr)	EEM (therms/yr)	(Mlbs/yr)	(gals/yr)
Better Envelope	\$62,735	2,191	15.5	653	0	0	0
		From Energy	From Energy	From Energy			
		Model dated	Model dated	Model dated			
		16June2015	16June2015	16June 2015			

LL86/05 Reporting Form LL86 EEM sheet as follows:

	Reduction in	Reduction in Sum	Reduction in
	Electric Use	of Monthly Peak	Gas Used for
	from EEM	Demand from EEM	Heating from
	(Kwh/yr)	(Kw/yr)	EEM
			(therms/yr)
Low Flow Water Fixtures	4598	24.6	0
Variable Speed Pumps	7866	14.9	-440
Premium Efficiency Motors	1204	6.3	-10
Efficient condensing boiler	0	0	452
High Efficiency Classroom AHU	8955	65.1	0
Improved lighting and controls (incl daylighting)	56126	225.4	-600
Better Envelope	2,191	15.5	653
Total	98163	432.8	161
	From Energy		From Energy
	Model dated		Model dated
	16June2015		16June2015

LL86/05 Reporting Form Construction-Print sheet as follows:

Energy Mode	el Compliance Summary	PS49Q
	Project Name In SEPTS Capital Project Record	PS49Q
	Name of Project Phase in SEPTS Capital Project Record	N/A
	Managing Agency Internal Project Identification # in SEPTS Capital Project Record	LLW# 089232
	Green Building Rating System Utilized	NYC Green Schools 2009
Green Building	Has LocalLaw86@ cityhall.nyc.gov been invited to view USGBC application?	No
Rating	Cost Attributable to LEED [®] or Green Schools 2007 Compliance	\$117,165
	Electric Used in Project Area?	Yes
	Electric Rate Group	NYPA Public Buildings Conv
	Gas for Heating Used in Project Area?	Yes
	Gas Rate Group for Heating	Gas, Firm-Heating.
	Gas for Non-Heating Used in Project Area?	No
Energy Sources	Gas Rate Group for Non-Heating	
and Utility Rates	Purchased Steam Used in Project Area?	No
	# 2 Oil Used in Project Area?	No
	Is all energy use affected by the work that is subject to LL86 requirements metered	
	independently of other buildings or spaces?	Yes
	Will the cost of all energy use affected by project work be paid out of the city	
	treasury?	Yes
	Electric Use Baseline (Kwh/yr)	333,755
	Electric Use Design Case (Kwh/yr)	235,592
	Design Case with Unregulated Loads (Kwh/yr)	328,512
	Electric Peak Demand Baseline (Kw)	232
	Peak Demand Design Case (Kw)	173
	Peak Demand Design Case with Unregulated Loads (Kw)	203
	Sum of Monthly Electric Peak Demands Baseline (Kw/yr)	1,665
	Sum of Monthly Electric Peak Demands Design Case (Kw/yr)	1,232
	Sum of Monthly Peak Demands Design Case with Unregulated Loads (Kw/yr)	1,601
	Gas Use for Heating Baseline (therms/yr)	7,636
Energy Use and	Gas Use for Heating Design Case (therms/yr)	7,475
Electric Peak	Gas Use for Heating Design Case with Unregulated Loads (therms/yr)	13,257
Demand	Gas Use for Non-Heating Baseline (therms/yr)	0
	Gas Use for Non-Heating Design Case (therms/yr)	0
	Gas Use for Non-Heating Design Case with Unregulated Loads (therms/yr)	0
	Purchased Steam Use Baseline (Mlbs/yr)	0
	Purchased Steam Use Design Case (MIbs/yr)	0
	Purchased Steam Use Design Case with Unregulated Loads (MIbs/yr)	0
	#2 Oil Use Baseline (gals/yr)	0
	#2 Oil Use Design Case (gals/yr)	0
	#2 Oil Use Design Case with Unregulated Loads (gals/yr)	
	Methodology Required by LL86 Rules to Establish Energy Use and Peak Demand	ANSI/ASHRAE/IESNA
	Baseline and Design Case	Standard 90.1-2007, Energy
		Cost Budget
Detable Marte	is all potable water use in the portion of project that is subject to LL86	Voc
Potable water	Detable Water Lice Paceline (gale (w)	103 EE2 277
Use	Potable Water Use Design Case (cale/un)	552,277
Stormuster Down	rolable wale Use Design Case (gais/yi)	546,323
Stormwater Kun-	Stormwater Run Off Dasign Case (gals/yr)	
UT	Stormwater kun Off Design Case (gais/yr)	IN/A

LL86/05 Reporting Form Construction-EEM Print sheet as follows:

PS49Q						
EEM	Reduction in	Reduction in Sum of	Reduction in Gas	Reduction	Reduction in	
	Electric Use from	Monthly Peak Demand	Used for Heating	in Electric	Sum of	
	EEM (Kwh/yr)	from EEM (Kw/yr)	from EEM	Use from	Monthly Peak	
			(therms/yr)	EEM	Demand from	
				(Kwh/yr)	EEM (Kw/yr)	
Low Flow Water Fixtures	4598	24.6	0	0.8409	0.5133	
Variable Speed Pumps	7866	14.9	-440	0.0289	0.2405	
Premium Efficiency Motors	1204	6.3	-10	0	0	
Efficient condensing boiler	0	0	452	-0.002	-0.0018	
High Efficiency Classroom AHU	8955	65.1	0	-0.16	-0.1816	
Improved lighting and controls (incl daylighting)	56126	225.4	-600	0.277	0.4239	
Better Envelope	2191	15.5	653	0.0152	0	
Total	98163	432.8	161	0	0	

HVAC Optimization

E4.2R HVAC System Sizing – Avoid Oversizing

GSG committee indicated credit as anticipated at 4 June 2015 meeting.

Credit was documented and accepted during Design Phase submissions and there is no documentation that requires an update.

Power E5.1R Green Power

SCA GSG committee indicated, in 22Jun2018 meeting minutes, that credit documented.

The amount of energy required will be established from the project specific energy model (Option 1) related to credit E4.1R as per SCA Direction at meeting on 12 November 2014.

The latest results from the Energy Model Report dated 16 June 2015 indicates the Design Case with Unregulated Loads will have an annual energy consumption of 328,512 kWh. Based on this estimate, 114,979 kWh of green power will need to be purchased for each of the first two years of building operation to satisfy the 35% requirement.

The SCA has provided documentation to the Design Team that they have applied for and have received approval for obtaining the required 35% building electrical consumption through Green Power credits as follows: From: METLITSKY, GENDEL Sent: Thursday, April 28, 2016 8:16 AM To: MORRISON, CLEVELAND Subject: RE: RE: Beacon HS RE: Open Construction GSG Submission items?

Cleveland,

We do not need verification E5.1R Green Power credit.

City is buying green power in bulk for all city funded buildings, including schools. We need just to provide calculations of green power required.

Thank you

Gendel Metlitsky R.A. LEED Accredited Professional BD+C Sustainability Design Project Manager 718.472.8577

As stated in GSG Construction Phase Architect/PO Toolkit, Page 6, "New York City has stated that they are providing the requisite green power to meet this credit for all city projects, and thus by such fiat the credit can be initialed by the AOR. Refer to Appendix B for the Construction Phase Certification form.

Materials Credits

Efficient Material Use

M1.1R Storage and Collection of Recyclables

SCA GSG committee indicated credit as anticipated at 12 November 2014 and 12 March 2015 meetings

Credit was documented and accepted during Design Phase submissions and there is no documentation that requires an update.

M1.2 Building Reuse – 75% of structure and envelope

SCA GSG committee agreed credit is not feasible at the 12 November 2014 and 12 March 2015 meetings.

The focus of this project is the new addition so this credit would not be applicable and thus not feasible.

Refer to Appendix B for the Construction Phase Certification form.

M1.3 Building Reuse – 95% of structure and envelope

SCA GSG committee agreed credit is not feasible at the 12 November 2014 and 12 March 2015 meetings.

The focus of this project is the new addition so this credit would not be applicable and thus not feasible.

Refer to Appendix B for the Construction Phase Certification form.

M1.4 Building Reuse – 50% of interior non-structural

SCA GSG committee agreed credit is not feasible at the 12 November 2014 and 12 March 2015 meetings.

The focus of this project is the new addition so this credit would not be applicable and thus not feasible.

Refer to Appendix B for the Construction Phase Certification form.

M1.5R, 1.6, & 1.7 Construction Waste Management – 50, 75, or 95% diversion

SCA GSG committee indicated, in 22Jun2018 meeting minutes, that credit documented.

As this building addition is a new construction, it is assumed that no building structure or non-structural items can be reused.

Construc	tion Waste Mangemen	t	<u>کر</u>			
Credit M1	5R, M1.6 and M1.7		SCA S	eheel Censtrue	tion Authority	
				NYC Green School	s Rating System	
Project:	PS 49 Queens Addition					
Address:	63-60 80th St, Middle Village	e, NY 11379	Contractor:	EW How ell		
LLW:	89232		Preparer:	EME Group		
Date:	11/14/2017		Telephone:	212-529-5969		
Table 1: Co	onstruction Waste Managemen	nt diversion Summary				
Diverted / Materials	Recycled Description		Diversion / Recycling Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)	
Concrete				0.00	tons	
Wood			Bestway / City Recycling	175.01	tons	
Gypsum Wa	allboard		Bestway / City Recycling	23.89	tons	
Crushed As	sphalt		g	0.00	tons	
Masonry			Bestway / City Recycling	200.90	tons	
Cardboard			Bestway / City Recycling	75.34	tons	
Other: Metal			Bestway / City Recycling	46.18	tons	
Other: Plastic			Bestway / City Recycling	52.58	tons	
Other:						
Other:						
Other:						
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Other:						
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Other:						
Other:						
Other:						
Other:						
		TOTAL CONSTRUC	CTION WASTE DIVERTED	573.90	tons	
Landfill materials Description		Landfill Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)		
General Mix	ed Waste		Bestw ay	111.33	tons	
Other:						
Other:						
	Т	OTAL CONSTRUCTION W	VASTE SENT TO LANDFILL	111.33	tons	
		TOTAL OF AL	L CONSTRUCTION WASTE	685.23		
	PERCENTAGE OF C	ONSTRUCTION WASTED	DIVERTED FROM LANDFILL	84%		

Refer to Appendix A for the Construction Waste Management Plan, Waste Reduction Progress Reports, and signed letter stating total waste material diverted and method of diversion.

Refer to Appendix B for the Construction Phase Certification form.

Sustainable Materials M2.1R & 2.2 Recycled Content – 10% or 20%

SCA GSG committee indicated, in 22Jun2018 meeting minutes, that credit documented.

RECYCLED	CYCLED CONTENT - SUMMARY FORM							
redit M2.1R	R and M2.2				ŚC	A School (Constru	ction Authori
						NYC Greer	n Schools I	Rating System
Project:	PS 49 Queens Additio	n			Architect	John Ciardullo	, P.C	
Address:	63-60 80th St, Middle	Village, NY	11379		Preparer:	EME Group		
LLW #:	89232	Design #:			Telephone:	212-529-5969		
Date:	5/17/2018							
				Contractors Total (Construction (ost for CSI Divis	ione 2-10.	¢
						and an 45% of a		φ
				Assumed Mate		sed on 45% of c	ostabove:	D
			Recycled	i Materials Contei	nt Target (10%	% of the cost of I	viateriais):	\$
				Maria		D. I	0.1.1	
P	kaduat Nama	Ma	nufacturar	material Cost	Percentage	Percentage	Cost of	Recycled Content
PI	roduct Name	IVIa	nuracturer	(no Labor &	Post	Pre-	Complying	Information Source
				Equip.)	Consumer*	Consumer**	Material	
					by weight	by weight		
4000 psi	NW Air Entrained			\$	0%	8.37%	\$	Manufacturer Literat
		Best Con	oroto					
		Dest Cond	JIELE	¢	0.9/	0 500/	¢	Manufaatuman Litanat
4000 psi	NW Air Entrained			ð	070	0.3070	3	Manufacturer Literat
	Pump	Best Cond	crete					
				\$	0%	7.86%	\$	Manufacturer Literat
4000 psi	NW No Air Pump	Best Cond	crete					
	I			\$	0%	10.06%	\$	Manufacturer Literat
4000 nai I V	N Air Entrained Dump	Boot Con	roto					
		Best Cond			00/	2004		
Foan	nular 250 XPS	Owens Co	orning	\$	0%	20%	\$	Manufacturer Literat
Rei	inforcing Bar	Gerdau		\$	74%	21%	\$	Manufacturer Literat
Fo	pamular 604	Owens Co	orning	\$	0%	20%	\$	Manufacturer Literat
7	790-11 EV	Henry		\$	25%	0%	\$	Manufacturer Literat
	DB 200S	Henry		\$	0%	74%	\$	Manufacturer Websi
Con	ntinuous Wire	HB		\$	0%	97%	\$	Manufacturer Literat
S	Steel Rebar	Nucor		\$	83%	17%	\$	Manufacturer Literat
353	Column Anchor	HB			0%	99%	\$	Manufacturer Literat
	er Control Joint			<u> </u>	0%	50%	ŝ	Manufacturer Literat
120					259/	759/	e u	Manufacturer Literat
120				ф 	2370	7370	ф ф	
LOOK	LOK Iruss Wire	НВ		3	0%	97%	3	Manufacturer Literat
Dove	etail Brick Tie	НВ		\$	0%	97%	\$	Manufacturer Literat
Ligh	ntweight CMU	Barrasso		\$	0%	23%	\$	Manufacturer Literat
344	Ridgid Anchor	HB		\$	0%	99%	\$	Manufacturer Literat
355L (Column Anchor	HB		\$	0%	99%	\$	Manufacturer Literat
Туре	N Mortar Grey	Spec Mix		\$	0%	2%	\$	Manufacturer Literat
Tvi	pe S Mortar	Spec Mix		\$	0%	2%	\$	Manufacturer Literat
3000	psi Fine Grout	Spec Mix		\$	0%	2%	\$	Manufacturer Literat
Type	Mortar Colored	Spec Mix			0%	2%	\$	Manufacturer Literat
Tupo S	Mortar Colored	Spec Mix		<u> </u>	0%	270	پ ۲	Manufacturer Literat
iype S		Spec IVIIX			0/0	∠ /0	<u>م</u>	Manufacturer Literal
	lan Dantitian -		whitiana		1 1 1 1 1 1	0%	3	Manufacturer Literat
Toil	ler Partitions	Global Pa	rtitions		100/	00/	¢.	M C · · · ·
Toil F	ler Partitions IDPE Pipe	Global Pa Lane	rtitions	\$	40%	0%	\$	Manufacturer Literat
Toil F Me	ler Partitions IDPE Pipe etal Lockers	Global Pa Lane ASI Stora	rtitions ge Sol	\$ \$	40% 25%	0%	\$ \$	Manufacturer Literat Manufacturer Literat
Toil F Meta	ler Partitions IDPE Pipe etal Lockers I Stud Framing	Global Pa Lane ASI Stora Clark Diet	rtitions ge Sol rich	\$ \$ \$ \$	40% 25% 40%	0% 0% 9%	\$ \$ \$	Manufacturer Literat Manufacturer Literat Manufacturer Literat
Toil F Metal Metal	ler Partitions IDPE Pipe etal Lockers I Stud Framing I Stud Framing	Global Pa Lane ASI Stora Clark Diet Marino/W	rtitions ge Sol rich are	3 5 5 5 5 5 5	40% 25% 40% 20%	0% 0% 9% 14%	\$ \$ \$ \$	Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat
Toil F Metal Metal Grou	ler Partitions IDPE Pipe etal Lockers I Stud Framing I Stud Framing unds Blocking	Global Pa Lane ASI Stora Clark Diet Marino/W Marino/W	rtitions ge Sol rich are are	<u>s</u> <u>s</u> <u>s</u> <u>s</u>	40% 25% 40% 20%	0% 0% 9% 14%	\$ \$ \$ \$ \$	Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat
Toil F Metal Metal Grou Fur	ler Partitions IDPE Pipe etal Lockers I Stud Framing I Stud Framing unds Blocking rring Channel	Global Pa Lane ASI Stora Clark Diet Marino/W Marino/W Clark Diet	rtitions ge Sol rich are are rich	3 3 S 5 S - S - S - S - S - S -	40% 25% 40% 20% 20% 40%	0% 0% 9% 14% 14%	\$ \$ \$ \$ \$ \$ \$	Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat
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Toil H Metal Metal Grou Fur Shaft	ler Partitions IDPE Pipe etal Lockers I Stud Framing I Stud Framing unds Blocking rring Channel t Wall Framing t Wall Framing	Global Pa Lane ASI Stora Clark Diet Marino/W Marino/W Clark Diet Clark Diet	rtitions ge Sol rich are are rich rich		40% 25% 40% 20% 20% 40% 40%	0% 0% 9% 14% 14% 9% 9%	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat
Toil H Metal Metal Grou Fur Shaft Spazzer Ba	ler Partitions HDPE Pipe etal Lockers I Stud Framing I Stud Framing unds Blocking rring Channel t Wall Framing ar Horizontal Framing	Global Pa Lane ASI Stora Clark Diet Marino/W Marino/W Clark Diet Clark Diet	rtitions ge Sol rich are are rich rich rich	3 S S S S S S S S S S S S S S	40% 25% 40% 20% 20% 40% 40% 20% 40% 40% 40%	0% 0% 9% 14% 14% 9% 9% 9%	<u>s</u> <u>s</u> <u>s</u> <u>s</u> <u>s</u>	Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat
Toil F Metal Metal Grou Fur Shaft Spazzer Ba Ther	ler Partitions HDPE Pipe etal Lockers I Stud Framing I Stud Framing unds Blocking rring Channel t Wall Framing ar Horizontal Framing mafiber SAFB	Global Pa Lane ASI Stora Clark Diet Marino/W Marino/W Clark Diet Clark Diet Clark Diet Thermafib	rtitions ge Sol rich are are rich rich rich er	3 S S S S S S S S S S S S S S S S S S S	40% 25% 40% 20% 20% 40% 40% 0%	0% 0% 9% 14% 14% 9% 9% 9% 9% 70%	<u>s</u> <u>s</u> <u>s</u> <u>s</u> <u>s</u>	Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat
Toil F Metal Metal Grou Fur Shaft Spazzer Ba Then Mold T	ler Partitions HDPE Pipe etal Lockers I Stud Framing I Stud Framing unds Blocking rring Channel t Wall Framing ar Horizontal Framing mafiber SAFB Tough Sheetrock	Global Pa Lane ASI Stora Clark Diet Marino/W Marino/W Clark Diet Clark Diet Clark Diet Thermafib USG	rtitions ge Sol rich are are rich rich rich er	3 3 S S S S S S S S S S S S S S S S S S S S S S S S	40% 25% 40% 20% 20% 40% 0% 40% 5%	0% 0% 9% 14% 9% 9% 9% 9% 70% 93%	<u>s</u> <u>s</u> <u>s</u> <u>s</u> <u>s</u> <u>s</u>	Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat Manufacturer Literat

Gold Bond XP Sheetrock	National Gypsum	\$	5%	0%	\$	Manufacturer Literature
Mold Tough Shaft Liner	USG	\$	2%	97%	\$	Manufacturer Literature
Mold Defense Shaft Liner	Lafarge	<u> </u>	3%	96%	\$	Manufacturer Literature
Gold Bond XP Shaft Liner	National Gypsum	\$	5%	0%	\$	Manufacturer Literature
Glass Mat Panels	USG		0%	96%	\$	Manufacturer Literature
Glass Mat Shaft Wall Liner	USG	\$	0%	96%	\$	Manufacturer Literature
5/8' Fiberock Agua-Tough	USG	<u> </u>	3%	23%	\$	Manufacturer Literature
5/8" Hi-Impact XP	National Gypsum	<u> </u>	5%	0%	\$	Manufacturer Literature
5/8" Protecta AR 100	Lafarge	\$	3%	96%	\$	Manufacturer Literature
Cement Tile Backer Board	USG	<u> </u>	0%	15%	\$	Manufacturer Literature
Perma Base Tile Backer	National Gypsum	<u> </u>	0%	35%	\$	Manufacturer Literature
Metal Drywall Trim	Marino/Ware	\$	20%	14%	\$	Manufacturer Literature
Paper Faced Metal Corner Bead	USG	\$	0%	61%	\$	Manufacturer Literature
Portland Cement	Holcin	\$	0%	19%		Manufacturer Letter
Essroc Slag	Essroc Italcementi Group	<u> </u>	0%	100%	\$	Manufacturer Letter
Coram Sand	Coram	<u> </u>	0%	0%	\$	Manufacturer Letter
	Tiloop	<u> </u>	0%	0%	\$	Manufacturer Letter
		<u>۴</u>	0%	494	φ 	Manufacturer Letter
MBVR	BASE		078	470	ۍ د	Manufacturer Letter
Pozzolith 200N	BASE		0%	23%	3	Manufacturer Letter
Rolling Steel Doors	Cookson Company	<u> </u>	54%	8%	\$	Manufacturer
Arctic White Brick	Belden	\$	26%	4%	\$	Manufacturer
Mountain Red Brick	Belden	\$	9%	1%	\$	Manufacturer
NAUF Veneer Core Plywood	Columbia Forest Products		0%	80%	\$	Manufacturer
Terra NAF Particleboard	Flakeboard	\$	4%	92%	\$	Manufacturer
Wilsonart Laminate Types 335,		\$	34%	0%	\$	Manufacturer
735	Wilsonart					Documentation
Excelon Vinyl Composition Tile	Armstrong	\$	0%	1%	\$	Manufacturer
700 Series Wall Base	Roppe	\$	0%	10%	\$	Manufacturer
Quick Frame Header	Marino/Ware	\$	20%	14%	\$	Manufacturer
Mineral Wool	Hilti	\$	0%	90%	\$	Manufacturer
Thermafiber SAFB & Firespan 40	owens Corning	\$	0%	70%		Manufacturer
E Eissured Basic 102	USG		2%	65%		Manufacturer
Mare 88785		<u> </u>	0%	75%	5	Manufacturer
			26%	7%	\$	Manufacturer
ZOO Series Elberglass Insulation	Outona Carping	<u> </u>	0%	57%	÷.	Manufacturer
700 Series Fiberglass Insulation			0%	260/	φ φ	Manufacturei
Expansion Joint Filler	MR Meadows		0%	100/	¢	
NYCDDC A-4000 psi AE	Best Concrete Mix Corp	»	0%	10%	3	Manufacturer
Asphaltic Concrete Paving	Willets Point Ave		15%	0%	\$	Manufacturer
CAFCO 300 Fireproofing	lsolatek	\$	10%	0%	\$	Manufacturer
CAFCO 400 Fireproofing	Isolatek	\$	10%	0%	\$	Manufacturer
Precast Concrete	Accurate Precast	\$	12%	20%	\$	Manufacturer
Steel Stairs	Nucor	\$	81%	15%	\$	Manufacturer
Structural Steel	Steel Dynamics		75%	22%	\$	Manufacturer
Arctic White 0190	Daltile	\$	0%	35%	\$	Manufacturer
Sunflower DH50	Daltile	\$	0%	35%	\$	Manufacturer
Desert Gray	Daltile	\$	0%	35%	\$	Manufacturer
Waterfall 0169	Daltile	\$	0%	35%	\$	Manufacturer
SeaBreeze Q174	Daltile	\$	0%	35%	\$	Manufacturer
Waterfall D169	Daltile	\$	0%	8%	\$	Manufacturer
Parkland Arctic	Stone Peak	\$	0%	8%	\$	Manufacturer
253 Gold	Laticrete	\$	12%	24%	\$	Manufacturer
255 Multimax	Laticrete	\$	24%	9%	\$	Manufacturer
Fire Rated Frames	Technical Glass Products	\$	5%	21%	\$	Manufacturer
Push Plates	Assa Abloy/Rockwood	<u> </u>	56%	26%	\$	Manufacturer
Closers	Allegion/LCN	\$	57%	31%	\$	Manufacturer
Holder and Stop	Allegion/Glynn Johnson	\$	57%	31%	\$	Manufacturer
· · · ·						

Aluminum	Keymark Corp.	\$	8%	31%	\$	Manufa	cturer
Aluminum Panels	Mapes	\$	5%	5%	\$	Manufa	cturer
Aluminum Extrusions	Kawneer	\$	11%	62%	\$	Manufa	cturer
Aluminum Extrusions	Kawneer	\$	14%	60%	\$	Manufa	cturer
Aluminum Extrusions	Kawneer	\$	2%	65%	\$	Manufa	cturer
Aluminum Extrusions	Kawneer	\$	7%	63%	\$	Manufa	cturer
Aluminum Extrusions	Kawneer	\$	7%	63%	\$	Manufa	cturer
1 1/8" Clear Double Lami	Oldcastle	\$	0%	3%	\$	Manufa	cturer
1 13/16" Clear Low-e Double Lam	i Oldcastle	\$	0%	3%	\$	Manufa	cturer
1 5/32 Clear Spandrel Double Larr	Oldcastle	\$	0%	4%	\$	Manufa	cturer
19/32 Clear Monolithic Lami	Oldcastle	\$	0%	3%	\$	Manufa	cturer
Firelate	TGP	\$	0%	60%	\$	Manufa	cturer
HM Doors + Frames	LIF Industries	\$	26%	7%	\$	Manufacturer	
	Total Cost of Complying Material						
Confirm that Total Cos	t of Complying Materials is gre	ater than or equ	al to Project's Recyc	led Materials Cont	ent Target:	Ye	s
Definitions:							
* Post-Consumer Recycled Conte	nt: Material or finished pro	duct that has	served its intended	d consumer use	and has b	een	
discarded by consumer.							
** Pre-Consumer Recycled Conter	nt: Recovered industrial an	d manufacturi	ing materials diver	ted from munici	pal solid wa	aste for	
the purpose of collection and rec	ycling.						
Notes:							
1. Recycled content for concrete - p	rovide cost for cementitious	s materials an	d percentage of ce	ementitious mat	erials that a	ire	
recycled content.							
2. Recycled content for steel produce	cts - where it is not possible	e to determine	e recycled content -	use default ass	sumption of	25% post-	
consumer recycled content							

Refer to Appendix A for Comprehensive Contractor Sustainable Materials Form and Contractor Sustainable Materials Tracking Form.

Refer to Appendix B for the Construction Phase Certification form.

M2.3 & 2.4 Regional Materials – 10% or 20%

SCA GSG committee indicated, in 22Jun2018 meeting minutes, that credit documented.

Credit M2.3 and M2.4 Project: PS 49 Queens Addition Address: 83-60 80h St. Middle Wilage, NY 11379 NVC Green Schools Rating System NVC Green Schools Rating System Date::::::::::::::::::::::::::::::::::::	REGIONAL	MATERIALS - S	UMMARY	FORM			5				
Project PS 49 Queens Addition Addition<	Credit M2.3 a	and M2.4					SCA S	ichool Co	nstruction	Authority	
Project: PS 49 Queens Addition Architect: John Clarcullo, P.C. Address: 652-08 00h SL Middle Village, NY 11379 Preparer:: EME Group Image: EME Group						-	NYC	NYC	Green Schools	Rating System	
Project: JPS 49 Queens Addition Architest: John Clardulo, P.C. Address: G3-80 bbt, St. Mddwillage, WY 1379 Prepare:: Elle Group Image: Status of the status of											
Address: (63-60 80h: St, Middle Village, NY 11379 Prepare: Prepare: Edity LLW #: 99232 Design #: Telephone: 212-529-5969 Date: 5/24/2018 Contractors Total Construction Cost for CSI Divisions 2-10: \$ Assumed Materials Cost based on 45% of cost above: \$ \$ Product Name Manufacturer Cost for CSI Divisions 2-10: \$ Product Name Manufacturer Cost for CSI Divisions 2-10: \$ 4000 psi NW Air Entrained Best Concrete \$ Origin above: \$ 4000 psi NW Air Entrained Best Concrete \$ 90% \$ \$ 90% \$ \$ 90% \$ \$ 90 4 Manufacture Nanufacture Nanufacture \$ \$ 90% \$ \$ 90 4 Manufacture \$ \$ 90% \$ \$ 90 4 Manufacture \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Project:	PS 49 Queens Ac	ddition				Architect:	John Ciardu	lo, P.C		
LLW #: 89:322 Design #: Telephone: 212:523-589 Date: 5:/24/2018 Contractors Total Construction Cast for CSI Divisions 2-10: \$ Product Name Regional Materials Cost based on 45% of cost above: \$ \$ Product Name Mainfait Parcentage Cost of Factors Total Construction Cast for CSI Divisions 2-10: \$ 4000 psi NW Air Entrained Cost (m) Parcentage Cost of Factors Total Construction Cast for CSI Divisions 2-10: \$ 4000 psi NW Air Entrained Extraction manufacture Regional Material Corruping Datance n mises between project site and site of Hormaton Maudateture 4000 psi NW Air Entrained S 90% \$ 90 4 Maudateture 4000 psi NW No Air Pump Best Concrete \$ 91% \$ 90 4 Maudateture 4000 psi NW No Air Pump Best Concrete \$ 88% \$ 143 4 Manufacture 4000 psi NW No Air Pump Best Concrete \$ 88% \$ 143 4 Maudateture Foamular 250 XPS Owens Corning \$ 100% \$ 68 <	Address:	63-60 80th St, Mid	ddle Village	, NY 11379			Preparer:	EME Group			
Date: 5/24/2018 Date: 5/24/2018 Contractors Total Construction Cost for CSI Divisions 2-10: \$ Regional Materials Cost based on 45% of cost above: \$ Regional Materials Cost Trace In Meterial Second Cost of CSI Divisions 2-10: \$ Poduct Name Menufacturer Cost (no Cast (no Convertige) Cost of Distance in Meterials): \$ 4000 psi NW Air Entrained Conventional Best Concrete \$ 90% \$ Distance in Meterial meterial Meterial Meterial 4000 psi NW Air Entrained Pump Best Concrete \$ 90% \$ 90 4 Manufacturer Licerature 4000 psi NW No Air Pump Best Concrete \$ 91% \$ 90 4 Manufacturer 4000 psi NW No Air Pump Best Concrete \$ 91% \$ 90 4 Manufacturer 4000 psi NW No Air Pump Best Concrete \$ 81% \$ 90 4 Manufacturer Foamular 250 XPS Owens Coming \$ 100% \$ \$ \$ \$ <td< td=""><td>LLW #:</td><td>89232</td><td></td><td>Design #:</td><td></td><td></td><td>Telephone:</td><td>212-529-596</td><td>9</td><td></td></td<>	LLW #:	89232		Design #:			Telephone:	212-529-596	9		
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Metal Stud FramingClark DietrichS1477S104101ManufacturetMetal Stud FramingMarino/Ware\$37%\$6430ManufacturerGrounds BlockingMarino/Ware\$37%\$6430ManufacturerFuring ChannelClark Dietrich\$44%\$104101ManufacturerShaft Wall FramingClark Dietrich\$44%\$104101ManufacturerSpazzer Bar Horizontal FramingClark Dietrich\$44%\$104101ManufacturerMold Tough SheetrockUSG\$93%\$499148ManufacturerMold Defense SheetrockLafarge\$100%\$27147Manufacturer	Type S IV		Spec Mix		<u> </u>	44%	5	104	101	Manufacturer	
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Metal Stud FramingMarino/WareIteratureGrounds BlockingMarino/Ware\$37%\$6430ManufacturerGrounds BlockingMarino/Ware\$44%\$104101ManufacturerFuring ChannelClark Dietrich\$44%\$104101ManufacturerShaft Wall FramingClark Dietrich\$44%\$104101ManufacturerSpazzer Bar Horizontal FramingClark Dietrich\$44%\$104101ManufacturerMold Tough SheetrockUSG\$93%\$499148ManufacturerMold Defense SheetrockLafarge\$100%\$27147Manufacturer					\$	37%	\$	64	30	Manufacturer	
Grounds BlockingMarino/Ware\$37%\$6430ManufacturerGrounds BlockingMarino/Ware\$\$44%\$104101ManufacturerFuring ChannelClark Dietrich\$44%\$104101ManufacturerShaft Wall FramingClark Dietrich\$44%\$104101ManufacturerSpazzer Bar Horizontal Framing\$44%\$104101ManufacturerKold Tough SheetrockUSG\$93%\$499148ManufacturerMold Defense SheetrockLafarge\$100%\$27147Manufacturer	Metal S	Metal Stud Framing		Marino/Ware						Literature	
Grounds Blocking Marino/Ware Literature Furing Channel Clark Dietrich \$ 44% \$ 104 101 Manufacturer Shaft Wall Framing Clark Dietrich \$ 44% \$ 104 101 Manufacturer Spazzer Bar Horizontal Framing Clark Dietrich \$ 44% \$ 104 101 Manufacturer Mold Tough Sheetrock USG \$ 93% \$ 499 148 Manufacturer Mold Defense Sheetrock Lafarge \$ 100% \$ 271 47 Manufacturer					\$	37%	\$	64	30	Manufacturer	
Furing ChannelClark DietrichS44%S104101ManufacturerShaft Wall FramingClark Dietrich\$44%\$104101ManufacturerSpazzer Bar Horizontal FramingClark Dietrich\$44%\$104101ManufacturerMold Tough SheetrockUSG\$93%\$499148ManufacturerMold Defense SheetrockLafarge\$100%\$27147Manufacturer	Ground	Grounds Blocking		are	<u> </u>	4.407	¢	104 101	Literature		
Shaft Wall Framing Clark Dietrich \$ 44% \$ 104 101 Manufacturer Spazzer Bar Horizontal Framing Clark Dietrich \$ 44% \$ 104 101 Manufacturer Mold Tough Sheetrock USG \$ 93% \$ 499 148 Manufacturer Mold Defense Sheetrock Lafarge \$ 100% \$ 271 47 Manufacturer	Furing Channel		Clark Dietrich		ą	4470	ą	104 101		Literature	
Shaft Wall Framing Clark Dietrich Image: Clark Dietrich Literature Spazzer Bar Horizontal Framing Clark Dietrich \$ 44% \$ 104 101 Manufacturer Literature Mold Tough Sheetrock USG \$ 100% \$ 271 47 Manufacturer Literature Mold Defense Sheetrock Lafarge \$ 100% \$ 271 47 Manufacturer Literature					\$	44%	\$	104	101	Manufacturer	
Spazzer Bar Horizontal Framing Clark Dietrich \$ 44% \$ 104 101 Manufacturer Literature Mold Tough Sheetrock USG \$ 93% \$ 499 148 Manufacturer Literature Mold Defense Sheetrock Lafarge \$ 100% \$ 271 47 Manufacturer Literature	Shaft W	Shaft Wall Framing		rich						Literature	
Framing Clark Dietrich Literature Mold Tough Sheetrock USG \$ 93% \$ 499 148 Manufacturer Mold Defense Sheetrock Lafarge \$ 100% \$ 271 47 Manufacturer	Spazzer E	Spazzer Bar Horizontal				44%	\$	104	101	Manufacturer	
Mold Tough Sheetrock USG \$ 93% \$ 499 148 Manufacturer Mold Defense Sheetrock Lafarge \$ 100% \$ 271 47 Manufacturer	Fi	raming	Clark Diet	rich						Literature	
Mold Defense Sheetrock Lafarge 100% 271 47 Manufacturer Literature Literature Literature Literature Literature	Mald Te	ah Chester	1100		\$	93%	\$	499	148	Manufacturer	
Mold Defense Sheetrock Lafarge		Ign Sheetrock	036		<u> </u>	100%	<u> </u>	271	A7	Manufacturer	
	Mold Defe	nse Sheetrock	Lafarce		ų	10070	Ψ	2/1	-17/	Literature	

		¢	070/	¢.	400	176	
Mold Tough Shaft Liner	USG	\$	9/%	\$	499	176	Manufacturer Literature
		\$	100%	\$	271	47	Manufacturer
Mold Defense Shaft Liner	Lafarge	e	0.70/	e -	400	176	Literature
Glass Mat Panels	USG	¢	9/%	3	499	170	Literature
		\$	97%	\$	499	176	Manufacturer
Glass Mat Shaft Wall Liner	USG	L _					Literature
5/8" Eiberock Agus Tough	Lafarae	\$	16%		499	354	Manufacturer
3/0 Tibelock Aqua-Tough		\$	100%	\$	272	48	Manufacturer
5/8" Protecta AR 100	Lafarge						Literature
		\$	86%	\$	499	176	Manufacturer
Cement Tile Backer Board	USG	<u> </u>	2 5 0/		200	322	Literature
PermaBase Tile Backer	National Gypsum	Φ	5570		500	522	Literature
	- 71		37%	\$	64	30	Manufacturer
Metal Drywall Trim	Marino/Ware						Literature
Paper Faced Metal Corner	USG	\$	89%	\$	499	355	Manufacturer Literature
Deau	030	\$	100%	\$	499	499	Manufacturer
Essroc Slag	Essroc Italcementi Group						Letter
		\$	100%	\$	499	499	Manufacturer
Coram Sand	Coram	<u> </u>	100%	<u> </u>	499	499	Letter
Tilcon Stone	Tilcon	φ	10070	φ	177		Letter
			87%	\$	499	499	Manufacturer
MBVR	BASF		600/		100	100	Letter
Pozzolith 200N	BASE	\$	68%	\$	499	499	Manufacturer Letter
		\$	100%	\$	12	25	Manufacturer
Continuous Wire	НВ						Literature
Steel Peher	Nucor	\$	100%	\$	207	207	Manufacturer
	INUCOI	<u>s</u>	100%		4	25	Manufacturer
353L Column Anchor	НВ	ψ	10070	÷		23	Literature
		\$	100%	\$	411	400	Manufacturer
Rubber Control Joint	НВ	<u> </u>	1009/	<u> </u>	26	25	Literature
120 Truss Mesh	НВ	a	100%	з	50	23	Literature
		\$	100%	\$	12	25	Manufacturer
Look Lok Truss Wire	НВ						Literature
Dovetail Brick Tie	НВ	\$	100%	\$	12	25	Manufacturer Literature
		\$	100%	\$	39	38	Manufacturer
Mesh Wall Tie	MWT						Literature
Lightunight CMU	Demesse	\$	100%	\$	112	45	Manufacturer
	Barrasso	<u>s</u>	100%	5	4	25	Manufacturer
344 Ridgid Anchor	НВ	Ŷ	10070	÷		20	Literature
		\$	100%	\$	4	25	Manufacturer
355L Column Anchor	НВ	¢	2.70/		(5	20	Literature
Quick Frame Header	Marino/Ware	¢	3/%	3	03	30	Letter
		\$	60%	\$	499	348	Manufacturer
Sheetrock Acoustical Sealant	USG	<u> </u>		Ļ			Letter
NYCDDC A-4000 psi AE	Best Concrete Mix Corn	\$	89%	\$	499	4	Manufacturer
		\$	15%	<u>s</u>	16	16	Manufacturer
Asphaltic Concrete Paving	Willets Point Ave	*		Ť	10	10	Documentation
		\$	100%	\$	159	46	Manufacturer
CAECO 300 Fireproofing	ISOIATEK	<u> </u>	1000/	<u> </u>	150	11	Documentation
CAFCO 400 Fireproofing	lsolatek	J.	100%	đ	139	40	Documentation

				\$	80%	\$	200	4	Manufac	turer
Preca	st Concrete	Accurate F	recast						Documen	tation
				\$	100%	\$	499	499	Manufac	turer
Me	tal Deck	Canam							Documen	tation
				\$	97%		208	499	Manufac	turer
Ste	el Stairs	Nucor							Documen	tation
				\$	100%	\$	188	62	Manufac	turer
Wat	erfall D169	Daltile							Documen	tation
				\$	94.90%	\$	100	499	Manufac	turer
1500 S	anded Grout	Laticrete							Documen	tation
				\$	94.90%	\$	100	499	Manufac	turer
1600 Ur	sanded Grout	Laticrete							Documen	tation
					96.90%	\$	100	499	Manufac	turer
2	53 Gold	Laticrete							Documen	tation
				\$	94.50%	\$	100	499	Manufac	turer
255	Multimax	Laticrete							Documen	tation
				\$	35.50%	\$	100	499	Manufac	turer
9235 V	Vaterproofing	Laticrete							Documen	tation
				\$	100.00%	\$	82	16	Manufac	turer
HM Do	ors + Frames	LIF Industr	es						CSM	F
				\$	100.00%	\$	29	29	Manufac	turer
Landscaping		Island Tops	soil						CSM	F
	1 0			\$	100.00%	\$	161	161	Manufac	turer
Expans	ion Joint Filler	MR Meado	WS						CSM	F
			Total Co	st of Comp	lying Material	\$				-
				· ·			_			
	Confirm tha	t Total Cost of (Complying Materi	als is greater	than or equal to	Project's Re	aional Materials (Content Target	Ves	
	Committe				than or equal to		giorial Materials	content rarget.	103	
Definitions:										
*** Regional	Materials: Regio	nallymanufac	ctured material	s that have	their origin wit	hin 500 mil	es of the projec	ct site. These v	vould inclu	uded
products	that are regionally	mined, harve	sted or re-use	d (including	g those salvag	ed from the	site).			
Notes:										
1 Regional	content for concre	ate provide co	mbined cost fo	r all concre	te materials a	nd distance	2			
informatic	or requested				to materials, a					
5 Dama	in requested.						It is the set of the			
2. Regional	content for mater	als with vario	us points of ex	traction all v	within the 500-	mile radius	list single item	n with the great	est	
distance.										

Refer to Appendix A for Comprehensive Contractor Sustainable Materials Form and Contractor Sustainable Materials Tracking Form.

Refer to Appendix B for the Construction Phase Certification form.

M2.5R Wallboard & Roof Deck Products – Mold Resistance

CA GSG committee indicated credit as anticipated at the 12 November 2014 and 12 March 2015 meetings.

Credit was documented and accepted during Design Phase submissions and there is no documentation that requires an update.

M2.6R Low Mercury Lighting – Reduce Mercury Waste

SCA GSG committee indicated credit as anticipated at the 12 November 2014 and 12 March 2015 meetings.

Credit was documented and accepted during Design Phase submissions and there is no documentation that requires an update.

Indoor Environmental Quality

IAQ Post-Occupancy Q1.1R Minimum IAQ Performance & Increased Ventilation

SCA GSG committee indicated credit as anticipated at the 12 November 2014 and 12 March 2015 meetings.

Credit was documented and accepted during Design Phase submissions.

Air Balancing Reports were completed; see stamped and signed cover page below:

15993-001-003-



125 State Street, Westbury, New York 11590 (516) 546-5700 / FAX (516) 546-7521

PS 49 - Middle Village

EW Howell Project: #03-15-13

Submittal Date: 08/24/17

Revision Date: 01/17/18

Contractor: E.W. Howell Co., LLC

Subcontractor: Tomco Mechanical Corp.

Supplier: Precision Test & Balance Corp.

Manufacturer: PTB

Preparer: Precision Test & Balance Report

Drawing No .:

Specification No.:15993-001-003

Sect./Div. No.: Sect. 15 / Div.15993

Paragraph No.: All Paragraphs within given sections

Title: 15993 - FINAL AIR BALANCING REPORT



Q1.2R Outdoor Air Delivery Monitoring

SCA GSG committee indicated credit as anticipated at the 12 November 2014 and 12 March 2015 meetings.

Verification of operation of flow measuring stations; SCA noted in 30Mar2018 GSG Construction Submission seminar not to hold up GSG final submission for meter deficiencies.

IAQ Pre-Occupancy

Q2.1R Construction IAQ Management Plan – During Construction

SCA GSG committee indicated, in 22Jun2018 meeting minutes, that credit documented.

Refer to Appendix A for IAQ Plan and photos of IAQ measures.

Refer to Appendix B for the Construction Phase Certification form.

Q2.2R Construction IAQ Management Plan – Before Occupancy

SCA GSG committee indicated, in 22Jun2018 meeting minutes, that Insufficient information to determine credit documentation. Consultant to provide a letter from Contractor attesting that flush-out was completed.

Refer to Appendix A for flush-out procedures description, flush-out period on construction schedule, flush-out calculations, and flush-out letter.

Refer to Appendix B for the Construction Phase Certification form.

Low-Emitting Materials

Q3.1R Low-Emitting Materials – Adhesives and Sealants

SCA GSG committee indicated, in 22Jun2018 meeting minutes, that credit documented. However, Consultant to include VOC content of <20 g/L for the Wilsonart 3100 PVA Adhesive as per manufacturer's specifications.

LOW EMIT	TING MATERIALS - SUM	ORM A (page 1)								
Adhesives and Sealants					<u>ŚCA</u> School Construction Authority					
Credit Q 3.1	R				NYC Green S	chools Rating System				
						5	,			
Project:	PS 49 Queens Addition			Architect	John Ciardullo P	C				
Address:	63-60 80th St. Middle Vil	lage NY	11379	Prenarer	EME Group	•				
11W#·	89232	Design #		Telephone	212-529-5969					
Date:	4/2/2018. Revised 6/25/2	2018								
				_						
Adhesives		Manufacturer's Name Product Name			Product's VOC Level [g/L less	VOC Limit [g/L less				
	Product Use			Pr	oduct Name	water]	water]			
Architectur	al Applications									
Indoor Carpe	et Adhesives	NA					50			
Carpet Pad	Adhesives	NA					50			
Wood Floori	ing Adhesives	NA					100			
Rubber Floo	or Adhesives	Laticrete		Latapoxy	210 Adhesive	0	60			
Rubber Floo	r Adhesives	Connor Sports Flooring		ElastiPlus Adhesive Adhesive		0	60			
Subfloor Ad	hesives						50			
Ceramic Tile	e Adhesives	Laticrete		253 Gold		0	65			
Ceramic Tile Adhesives		Laticrete		255 MultiMax		0	65			
Ceramic Tile Adhesives		Laticrete		1500 Gro	ut	0	65			
Ceramic Tile Adhesives		Laticrete		1600 Gro	ut	0	65			
Ceramic Tile Adhesives		Laticrete		254 Platir	านท	0	65			
Ceramic Tile	e Adhesives	Laticrete		9235 Wat	erproofing	2.4	65			
VCT & Aspł	nalt Adhesives	Mapei		Ultrabond	Eco 711	11	50			
Drywall & Pa	anel Adhesives	Titebond		Acoustica	al Ceiling Tile	3	50			
Cove Base A	Adhesives	Mapei		Ultrabond	Eco 575	40	50			
Multipurpose	e Construction Adhesives	CRL		Gunther F	Premier Plus Mirror	10	70			
Structural G	lazing Adhesives						100			
General Cor	nstruction Adhesive	Liquid Nails		Heavy Du	ty Const Adhesive	70	70			
Specialty A	Applications						F 40			
PVC Welding							510			
ARS Woldin	ling						490			
ABS Welding							250			
Adhesive Primer for Plastic							550			
		Wilsonart		Wilsonart 3100 P\/A Adhesive		20	30			
Special Pur	oose Contact Adhesive					20	250			
Structural W	/ood Member Adhesive			1			140			
Sheet Applie	ed Rubber Lining Operation)					850			
Top & Trim	Adhesive	1					250			

LOW EMIT	TING MATERIALS - SUM	MARY FC	DRM A (page 2)		5		
Adhesives	and Sealants				SCA School Co	nstruction	Authority
Credit Q 3.1	र			MY0	NYC Green S	chools Rating	System
						5	
Project:	PS 49 Queens Addition			Architect:	John Ciardullo, P.	С	
Address:	63-60 80th St. Middle Vi	lage. NY	11379	Preparer:	EME Group		
LLW #:	89232	Desian #:		Telephone:	212-529-5969		
Date:	7/27/2017						
Adhesives						Product's	VOC Limit
	Product Use	Manu	facturer's Name	Pr	oduct Name	VOC Level	la/L less
Architectur	al Applications			1			19
Substrate S	Specific Applications						
Metal to Me	tal						30
Plastic Foar	ns						50
Porous Mate	erial (except wood)	Sika		SikaGrou	t 212	0	50
Porous Mate	erial (except wood)	Sika		Armatec	110 EpoCem	40	50
Porous Mate	erial (except wood)	Hilti		Hit HY 20	0 A/R	27	50
Fiberglass				-			80
Wood		Jowat		Edge Bar	dina Glue	10	30
Wood		Titebond		Ultimate \	Nood Glue	9	30
Trood		Incoderia		Ontintato			00
Substrate S	Specific Applications						
General pur	nose mist sprav					65	% VOCs by wt
General pur	oose web spray					55% \	OCs by weight
Special pur	ose aerosol adhesives					0070 0	70% VOCs by
(all types)							weight
(an types)							weight
Soalante						Product	VOC Limit
Sealants	Product Lleo	Manu	ifacturor's Namo	Dr	oduct Namo	VOCLovel	
		Wallu		F1		VOC Level	[g/L 1835
Architectura		USG		Sheetrock	Acoustical Sealant	15	250
Architectura	I	Henny	i		ES Sealant	5	250
Architectura	I	Henry				0	250
Architectura	I	Henry				0	250
Architectura	I	Laticrete				32.7	250
Fire Barrier	Sealant	3M		CP 25WF	 !+	JZ.1	250
Fire Barrier	Sealant	Hilti		CP 606		71	250
	Sediant	1 1110				7.1	200
Circ Dorrion	Caalant	Hilti		CP 672		0	250
File Damer	Sealant			FireSten	laint Chrow CEC CD	0	250
	Caslant	Hilti			Juint Spiay CFS-SF-	24	050
Fire Barrier	Sealant	1 1:14:		VVD Finanton (Niliaana Caalant	34	250
Fire Barrier Sealant		Hilti		Firestop 3		48	250
Fire Barrier	Sealant			FS-UNE	VIAĂ	9	200
Readure				_			300
Roadway							250
Single-Ply H							450
Other							420
Architectura							250
Architectura	I POTOUS						//5
Uther							750
Refer to Appendix B for the Construction Phase Certification form.

Q3.2R Low-Emitting Materials – Paints and Coatings

SCA GSG committee indicated, in 22Jun2018 meeting minutes, that credit documented.

LOW EMITTIN	G MATERIALS -	SUMMARY FORM B		\sim			
Paints. Coatir	nas. Floorina		Ś	CA School Co	onstruction Authority		
Composite W	ood & Agrifiber P	Products	MNYC .	NYC Green So	chools Rating Sys	tem	
Credit Q 3.2R, 3	3.3R and 3.4R						
Project:	PS 49 Queens A	ddition	Architect:	John Ciardullo, P.	2		
Address:	63-60 80th St, M	iddle Village, NY 11379	Preparer:	EME Group			
LLW #:	89232	2 Design #:	Telephone:	212-529-5969			
Date:	12/12/2017	7					
Paints and Co	natings				Broduct's VOC	VOC Limit	
	Julingo						
Proc	duct Use	Manufacturer's Name	Product Name		water]	water]	
Architectural	paints						
Flats		Sherwin Williams	PM :	200 latex primer	0	50 g / L	
		Sherwin Williams	PN	200 latex flat	0	50 g / L	
		Sherwin Williams	Pre	prite block filler	<50	50 g / L	
Graffiti Resista	nt Coating	Prosoco	Sacrifi	cial Coating SC-1	30	50 g/L	
Non-Flats		Sherwin Williams	Pro ind.	Acrylic semi-gloss	<50	150 g/L	
		Sherwin Williams	PM 200 int	erior latex semi-gloss	0	150 g/L	
		Sherwin Williams	PM 200	interior latex gloss	<50	150 g/L	
A				atox EX 5100		050 (1	
Anti-corrosive,	anti-rust paints		ГІ	elex FA 3120	4	250 g / L	
Clear wood fi	nichoo						
varnish	IIISHES					350 g / l	
lacquer						550 g / L	
Floor coatings		Fuclid Chemical	Super F)iamond Clear VOX	96	100 g / L	
r ioor coatings	Curing Agent	Euclid Chemical	Kurez Di	R VOX Curing Agent	285	350 g / L	
		Euclid Chemical	Fuc	Diamond Hard	200	100 g / L	
		Laticrete	9265 Wat	erproofing Membrane	2 39	100 g / L	
				HvdroBan	2.39	100 g / L	
Floor Coatings		Sherwin Williams	Armos	eal 8100 floorplex	<50	100 g/L	
Floor Coatings		Tnemec	Enviro	Pox Series 287	8	100 g/L	
			ElastiPlu	s Water-based Top	-		
Floor Coatings		Connor Sports Flooring		Coat	94	100 g/L	
Concrete Seale	er	Sherwin Williams	H&C	Wet Look Sealer	98	100 g/L	
						Ŭ	
<u>Sealer</u>		· · ·					
waterproofing s	sealers	Miracle	5	11 H2O Plus	<65	250 g / L	
waterproofing s	sealers					250 g / L	
sanding sealer	S					275 g / L	
all other sealer	S					200 g / L	
		CAFCO	В	ond X Sealer	0 g/l	200 g/l	
		Henry	Aqua Bloc	PUMA Sealer/Prime	0 g/l	200 g/l	
Stains						250 g / L	

Refer to Appendix B for the Construction Phase Certification form.

Q3.3R Low-Emitting Materials – Flooring Systems

SCA GSG committee indicated, in 22Jun2018 meeting minutes, that credit documented.

LOW EMITT	ING MATERIALS - S	UMMARY	FORM B		\sim			
Paints, Coar	tings, Flooring			S	CA School C	onstruction	Authority	
Composite \	Wood & Agrifiber Pr	oducts			NYC Green	een Schools Rating System		
Credit Q 3.2R	t, 3.3R and 3.4R							
Project:	PS 49 Queens Ad	dition		Architect:	John Ciardullo, F	у.С		
Address:	63-60 80th St, Mid	Idle Village	e, NY 11379	Preparer:	EME Group			
LLW #:	89232	Design #:		Telephone:	212-529-5969			
Date:	12/12/2017							
Flooring						Turner of ODI	0	
Product Use		Ма	nufacturer's Name	Pr	oduct Name	Plus Document	ation Attached	
Vinyl Compo	sition Tile		Armstrong	E	xcelon VCT	Floor	Score	
Wall Base			Roppe	700 S	Series Wall Base	Floor	Score	

Refer to Appendix B for the Construction Phase Certification form.

Q3.4R Low-Emitting Materials – Composite Wood & Agrifiber Products

SCA GSG committee indicated, in 22Jun2018 meeting minutes, that credit documented.

				10-					
LOW EMITTIN	NG MATERIALS - S	UMMARY	FORM B		\wedge				
Paints, Coatii	ngs, Flooring			S	CA	School Co	nstructior	ι Αι	uthority
Composite W	ood & Agrifiber Pr	oducts				NYC Green Sc	Schools Rating System		
Credit Q 3.2R, 3	3.3R and 3.4R								
								_	
Project:	PS 49 Queens Ad	dition		Architect:	Joh	nn Ciardullo, P.C	;	-	
Address:	63-60 80th St, Mid	ldle Village	e, NY 11379	Preparer:	EM	E Group			
LLW #:	89232	Design #:		Telephone:	212	-529-5969			
Date:	12/12/2017								
Composite W	ood & Agrifiber Pr	oducts					Documenta	tion	of Lack of
Pro	duct Use	Ma	anufacturer's Name	Product Name		ct Name	added Urea	Forr	naldehyde
Wood Door			Marshfield	Marsh	field	Doorsystems	Yes		
Finish Carpent	ry		Columbia Forest Products	NAUF V	enee	r Core Plywood		Yes	
Casework			Columbia Forest Products	Purebond Plywood		Yes			
Casework			Nu	Green Particleboard		Yes			
Finish Carpent	ry		Flakeboard		Terr	a NAF	Yes		
Laminate Adhe	esive		Wilsonart	Wilsonart	310	0 PVA Adhesive		Yes	
Fire Treated W	/ood		John A. Biewer Co.	Dricon Fi	re Re	etardant Treated		Yes	

Refer to Appendix B for the Construction Phase Certification form.

SCA GSG committee indicated, in 22Jun2018 meeting minutes, that credit documented.

Credit was documented and accepted during Design Phase submissions.

See Q1.1R above for copy of stamped and signed cover page of the final Air Balancing Report.

Q4.2R Electric Ignition Stoves

SCA GSG committee indicated this credit as not feasible at 12 November 2014 and 12 March 2015 meetings.

No stoves are proposed for the addition.

Q4.3R Provide HEPA Vacuums

SCA GSG committee indicated credit as anticipated at 12 November 2014 and 12 March 2015 meetings.

High Efficiency Particulate Arrestor (HEPA) vacuums shall be provided through the SCA/F&E Unit as part of the initial equipment for the school.

 From:
 MENDEZ, DIANA

 Sent:
 Tuesday, March 04, 2008 5:57 PM

 To:
 SHAH, ARTI

 Cc:
 MAJOR, NICOLE

 Subject:
 RE: HEPA Vacuums and Recycling Bins

Arti:

The maintenance equipment list provided to new buildings is selected and approved by DOE/DSF, not F&E. The DOE/DSF approved list includes (2) HEPA vacuums. Please note there are other vacuums also provided (backpack vacuum and wet/dry vacuum).

Diana Mendez Manager, Operations - F&E NYC School Construction Authority

Controllability of Systems Q5.1R Controllability of Systems – Lighting

SCA GSG committee indicated credit as anticipated at 12 November 2014 and 21 May 2015 meetings.

Credit was documented and accepted during Design Phase submissions and there is no documentation that requires an update.

Q5.2R Controllability of Systems – Thermal Comfort

SCA GSG committee indicated credit as anticipated at 12 November 2014 and 12 March 2015 meetings

Credit was documented and accepted during Design Phase submissions and there is no documentation that requires an update.

Thermal Comfort

Q6.1R Thermal Comfort – Design

SCA GSG committee indicated credit as anticipated at 12 November 2014 and 12 March 2015 meetings.

Credit was documented and accepted during Design Phase submissions and there is no documentation that requires an update.

Lighting and Views

Q7.1 (75% classrooms), 7.2(90% classrooms) Daylight and Views – Daylight

SCA GCG committee agrees this credit is not feasible at 12 March 2015 meeting.

Credit was documented and agreed to as not feasible during Design Phase submissions and there is no documentation that requires an update.

7.3 (75% other spaces) Daylight and Views – Daylight

SCA GCG committee agrees this credit is not feasible at 12 March 2015 meeting.

Credit was documented and agreed to as not feasible during Design Phase submissions and there is no documentation that requires an update.

Q7.4 Daylight and Views – Views

SCA GSG committee indicated credit as anticipated at 12 March 2015 meeting.

Credit was documented and accepted during Design Phase submissions and there is no documentation that requires an update.

Q7.5 Visual Performance – Artificial Direct-Indirect Lighting

SCA GSG committee indicated credit as denied at the 21 May 2015 meeting as the documentation provided does not satisfactorily demonstrate compliance with SCA design requirements.

Credit was documented as denied during Design Phase submissions and there is no documentation that requires an update.

Acoustics

Q8.1R Minimum Acoustical Performance

SCA GSG committee indicated credit as anticipated at 12 November 2014 and 12 March 2015 meetings.

Credit was documented and accepted during Design Phase submissions and there is no documentation that requires an update.

Q8.2 Enhanced Acoustical Performance

SCA GSG committee indicated credit as anticipated at 12 November 2014 and 12 March 2015 meetings.

Credit was documented and accepted during Design Phase submissions and there is no documentation that requires an update.

Q8.3 Acoustic Windows

SCA GSG committee agreed credit not feasible at 12 November 2014 and 12 March 2015 meetings.

Credit was documented and agreed to as not feasible during Design Phase submissions and there is no documentation that requires an update.

Additional Credits

Required Support

A1.1R LEED Accredited Professional

SCA GSG committee agreed credit not feasible at 12 November 2014 and 12 March 2015 meetings.

William Jose Higgins, EME Consulting Engineers Group – Green Consultant



A1.2 Innovation: Active Design

SCA GSG agreed credit not feasible at 12 November 2014 and 12 March 2015 meetings.

Credit was documented and agreed to as not feasible during Design Phase submissions and there is no documentation that requires an update.

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Optional Site Impact
```

A2.1 Heat Island Effect – Non-Roof

Not authorized by SCA.

A2.2 Stormwater Design – Quantity Control

Not authorized by SCA.

Optional - Energy A3.1 Optimize Energy Performance

GSG committee indicated credit as anticipated at 4 June 2015 meeting.

Based on the Energy Model Report dated 16 June 2015, there is an energy cost savings of 19.0%, earning 4 points under this credit.

See Ec4.1R for LL86 forms.

A3.2 Renewable Energy

Not authorized by SCA.

Optional - IEQ A4.1 Low-Emitting Materials - Furniture

Not authorized by SCA.

Refer to Appendix B for the Construction Phase Certification form.

A4.2 Low-Emitting Materials – Ceiling and Wall Systems

Not authorized by SCA.

Refer to Appendix B for the Construction Phase Certification form.

Optional - Education A5.1 Building as a Teaching Tool

Not authorized by SCA.

Refer to Appendix B for the Construction Phase Certification form.

No other credit narratives and/or information required for the Construction Submission.

APPENDIX A

Credit Supporting Documentation

<u>Credit S1.1R: Exterior and Interior Dust Control Plans, Digital photos during construction from contractor, and Inspection</u> <u>logs during construction from contractor.</u>

Darcon Construction Inc. 360 Meacham Ave. Phone: 516-358-2533 Fax: 516-488-6467 Elmont, NY 11003 November 30, 2016 EW HOWELL 245 Newtown Rd Plainview, NY 11803 501900-001-002 Phone:516-390-8189 12/1/16 Attn: Robert Isbit PS 49 Middle Village Contract/PO #: C000014133 Project: Excavation, Foundation & Superstructure Response to Comments on Sub. No. S01900-001-001 EWH #03-15-13 Re: Job #: Dust Control Plan

Dear Mr. Isbit,

This is in response to returned submittal S01900-001-001.

Please be advised that Darcon will not be generating any dust inside the building. Darcon's contract for dust control pertains to work outside the building for earthwork.

Paragraph 1.21 as stated on returned submittal comment does not apply to Darcon.

Sincerely,

Alexand

APRIL MANALO Project Manager



Phone: (516) 358-2532 (516) 358-2533 Fax: (516) 488-6467

Darcon Construction Inc. 360 Meacham Avenue Elmont, New York 11003

DUST CONTROL PLAN

This plan details potential dust control measures that Darcon will implement to minimize dust emissions during demolition and grading activities. Dust emission may result from activities during demolition and grading from wind erosion. These sources are most effectively controlled using wet suppression.

DUST MITIGATION

The main mechanism for the control of fugitive dust emissions from construction activities and wind erosion are by watering, which leads to the formation of a surface crust to reduce the available reservoir of dust. In addition to water, a wide variety of chemical dust suppressants are available to enhance the formation of a surface crust. The effectiveness of wet suppression is dependent on the type of activities occurring and the frequency of watering. The watering schedule will be determined by site conditions and site activities.

Dust control measures will include, but may not be limited to:

- · Water all active construction areas at least twice daily and more often during windy periods.
- · Active areas adjacent to residences should be kept damp at all times.
- Cover all hauling trucks or maintain at least 2 feet of freeboard. Apply water at least twice daily
 on all unpaved access roads, parking areas and staging areas. Enclose, cover, water twice daily
 all exposed stockpiles.
- Limit traffic speeds on any unpaved roads to 15mph.
- Install erosion control measures to prevent silt run off to public roadways.





DUST CONTROL PLAN

- Any penetrations made through walls or floors will be covered after work is completed that day.
- When debris and/or material is being moved in or out of the working spaces, EW Howell will cover and tightly fix around the debris or material to ensure a dust free situation.
- Before construction debris is dumped into a garbage truck, EW Howell will water down the debris to ensure there will be limited dust created by the activity.
- At the end of each day, any paths used outside the contained construction space will be properly cleaned to ensure a dust free and clean environment.
- 5. The site will be kept clean of miscellaneous trash.
- 6. Areas to be swept and/or mopped daily, after work is completed.
- Spent material will be immediately contained and disposed of at an appropriate facility.
- 8. Lids will be kept on all containers of paints and coatings.
- When possible, cleaners with low hazardous air pollutant and volatile organic compound content such as water-based, alkaline, or microbial cleaners will be used.
- 10. During non-working hours, the site will be left in a condition that will prevent dust from being generated. At the end of each work day, security fencing will be installed and or inspected to prevent access and additional disturbance.

LONG ISLAND: 245 Novies in Res. 1. COOR Management of Direct Contemporate City) in Walk 2011 Sector Visiting And York (or 1000) EWHOWELL.COM

\mathbf{Q}	Darcon Const 360 Meachar Flmont, New	ruction Inc. 1 Avenue York 11003	
	EROSION CON	TROL LOG	
roject Name: <u>PS 49 middle Village</u> Date: <u>S/16/16</u> Time: <u>3:30</u> Weather: ite Active: Yes <u>No</u>		Address: 63-60 80 th Rainfall in the last 24 hrs: Days Since Last Inspection	st., Mitche Village, NY 1137 Yes:No:
spection Type: Initial Inspection 🖉 Regular Ins	pection Final	Actve Storm Water Runoff	Other
Filter Fabric installed ga	11 drains pu	plan	
Filter Fabric installed a	Il dains pu	glan	(More Space - next page)
Filte-Fabric installed a	Il drains pu	plan	(More Space - next page) (More Space - next page)
Fille Fabric installed g a Corrective Actions Taken/Needed: Tave Any Changes Been Made to the ESCP: f Yes, What Changes Have Been Made:	1 drain s per Yes	No	(More Space - next page) (More Space - next page)
ave Any Changes Been Made to the ESCP Yes, What Changes Been Made to the ESCP	Yes Yes	No Action P	(More Space - next page) (More Space - next page) (More Space - next page) an; Yes:No;

Darcon C 360 Elmor	Phone: (516) 358-2533 Fax: (516) 488-6467 Onstruction Inc. Meacham Avenue of, New York 11003
EROSIO	N CONTROL LOG
Project Name: Date: <u>6/1/16</u> Site Active: Yes <u>No</u> Inspection Type: Initial Inspection Regular Inspection <u>J</u> Fir	Address: G3-G0 85h G4., Mache Village, NY 11376 Rainfall in the last 24 hrs: Yes: No: //////////////////////////////////
Observations: Tree pits are all in order no Silt Sence and bale dike in good Drainage is dean Offician silt and a	adjustments needed Shape left is (More Space - next page)
Corrective Actions Taken/Needed:	
	(More Space - next page)
Have Any Changes Been Made to the ESCP. Yes	No
Have The Changes Been Documented: Red Lines: Yes <u>W</u> Inspected By: Print Name: <u>BILLage</u> Signature:	No Action Plan: Yes: No: Title:





Phone: (516) 358-2533 Fax: (516) 488-6467



Darcon Construction Inc.

360 Meacham Avenue Elmont, New York 11003

	EROSION CO	NTROL LOG	
Project Name: Date: 10 125 126 0 Site Active: Yes No Inspection Type: Initial Inspection	Regular Inspection / Final	Address: Rainfall in the last 24 hrs: Days Since Last Inspection Active Storm Water Runoff	Matte filane NY Yes:No: Other
Observations: Tracking bad needs maint tree glands postection in a Drainings is aban from	enance food condition. No adjustme citt a obtails	nt necked	(More Snace - next nage)
Corrective Actions Taken/Needed: 5-Forie for frucking part 1	replaced + comparted.		(More Space - next page)
Have Any Changes Been Made to the ESC If Yes, What Changes Have Been Made:	P; Yes	No	
Have The Changes Been Documented: Re Inspected By: Print Name: Signature:	d Lines: Yes	No Action Plan: Title	Yes:No: e:Ale_Super











Phone: (516) 358-2533 Fax: (516) 488-6467



Darcon Construction Inc.

360 Meacham Avenue Elmont, New York 11003

	EROSION C	CONTROL LOG		
Project Name: <u>PS 49 Middle Village</u> Date: <u>12 Ne 16</u> Time: <u>100 pm</u> Weather: Site Active: Yes No Regular Inspection	Clear, Partly o	Address: Rainfall in the Days Since La:	last 24 hrs: Yes: st Inspection	No:
Observations: Drainage intet protection inspected. No b	uild up, well p	vaintained.		
				(More Space - next page)
Corrective Actions Taken/Needed: NONE				
				(More Space - next page)
Have Any Changes Been Made to the ESCP: If Yes, What Changes Have Been Made:	Yes	No		
Have The Changes Been Documented: Red Lines:	Yes	No	Action Plan: Yes:	No:
Signature: Af enth	CELTON L.S.			NICO



Da	rcon Const 360 Meacha Elmont, New	20000000000000000000000000000000000000	Phone: (516) 358-2533 Fax: (516) 488-6467
	EROSION COM	TROL LOG	
Project Name: PS 49 middle Village Date: 5/16/16 Time: 3:30 Weather:	Sunny	Address: 63-60 80 th Rainfall in the last 24 hrs: Days Since Last Inspection	St., Middle Hillage, NY 11379 Yes:No:
Inspection Type: Initial Inspection 🖌 Regular Inspection	Final	Active Storm Water Runoff	Other
Bale dike and silt fence i.	staller p	er plan	
Filter Fabric installed g all a	lea in s pe	plan	(More Space - next page)
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Filter Fabric installed all a Corrective Actions Taken/Needed: Have Any Changes Been Made to the ESCP: If Yes, What Changes Have Been Made:	Yes	No_/	(More Space - next page) (More Space - next page)

•	Darcon Con 360 Meac Elmont, No	struction Inc. hant Avenue wy York 11003	Phone: (Fax: (5	516) 358-2533 16) 488-6467
	EROSION C	ONTROL LOG		
Project Name: PS 49 middle Yillage Date: 6/1/16 Time: 3:30 Weather Site Active: Yes No	sonny	Address: G3 - Rainfall in the la Days Since Last	GO Edit A., Metalle st 24 hrs: Yes: Inspection 15	No: 111 No:
Inspection Type: Initial Inspection Regular In	spection Final	Actve Storm Water Ru	noffOt	her
Drainage is Jean Offrem Corrective Actions Taken/Needed:	soft and dep		(Mo	ore Space - next page)
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Have Any Changes Been Made to the ESCP. If Yes, What Changes Have Been Made:	Yes	No		
Have The Changes Been Documented Red Lines:	Yes_NA	No	Action Plan: Yes	No:
Inspected By: Print Name: SJIT	uyje		Intie:	y .

















M1.5R, M1.6, & M1.7: Construction Waste Management Plan, Waste Reduction Progress Reports with sample of carting tickets, and signed letter stating total waste material diverted and method of diversion.



PS 49

63-60 80th Street

Middle Village, NY 11379

CONSTRUCTION WASTE

MANAGEMENT PLAN

January 21, 2015

245 Newtown Road, Suite 800 • Plainview, New York 11803 • Tel (516) 921-7100 • Fax (516) 921-0119 592 Fifth Avenue-Seventh Floor • New York, New York 10036 • Tel (212) 930-1050 • Fax (212) 704-9817 www.ewhowell.com

DEMOLITION & CONSTRUCTION WASTE MANAGEMENT PLAN

Objectives

The objectives of this plan are to salvage and recycle as much non-hazardous demolition & construction waste as possible.

II. Project Description

Building Site:

The project is located at 63-60 80th Street, Middle Village, New York. The site contains an existing New York City Public School, to which we will build a 3 story addition.

- III. Plan Implementation, Oversight and Enforcement
 - The demolition & construction waste management plan will be managed by E.W. Howell and Bestway Carting Inc., and will encompass all general non-hazardous demolition & construction debris. The plan will provide oversight, coordination and enforcement of all waste management on site and as directed by their contract.
 - E.W. Howell will assemble copies of all tickets, receipts or other submittal information related to waste recycling, salvage or removal. The Waste Reduction Progress Reports will be submitted with each Application for Payment.
 - 3. Bestway Carting Inc. will compile a log of the salvaged and recycled material throughout the demolition & construction phase. The log will track the total amount of salvaged and recycled materials by weight or cubic yards. The amount of the materials sent to the landfill by weight or cubic yards, and the overall salvage recycled rate for the project (see attachments for format). The log will be updated and presented to EWH for review on a monthly basis.

IV. Waste Management Measures During Demolition & Construction

During the demolition & construction and site preparation phase, all salvage and recycling activities will be undertaken by E.W. Howell. The target material, sorting methods and required submittals are described below:

During the demolition & construction phase, all salvage and recycling activities will be undertaken by E.W. Howell along with Bestway Carting Inc. The target materials, sorting methods and required submittals are described below.

Page 1 of 6

LIST OF TARGETED DEMOLITION & CONSTRUCTION WASTE FOR SALVAGE/RECYCLING

Masonry and CMU Wood sheet materials Metals Roofing Insulation Carpet and pad Gypsum board Piping Electrical conduit Packaging materials; paper, cardboard, boxes, plastic sheet and film, polystyrene packaging, wood crates and plastic pails

POINTS OF WASTE GENERATION - FOR DEMOLITION & CONSTRUCTION

1. 63-60 80TH Street Middle Village, NY 11379 Demolition of existing structures and construction waste from the addition.

SORTING METHODS

 All demolition & construction waste material will be gathered in a central location and then trucked to a remote location to be off loaded by Bestway Carting Inc. for sorting and recycling. E.W. Howell will provide a letter from Bestway Carting Inc. on their letterhead declaring their recycling rate and list the receiving facilities/companies that will be purchasing or accepting the recycled or salvaged materials.

MATERIALS/EQUIPMENT PROTECTION METHODS

All reusable materials will be cleaned and stored on site in a lockable storage container.
 E.W. Howell does not foresee that there will be any reusable material. All new material will be stored in a dry safe place on site.

DOCUMENTATION TO BE PROVIDED

- 1. Waste Management Plan
- Waste Reduction Progress Reports; weight tickets and receipts from companies listed below.

Demolition Phase (estimated quantities and percentages):

Material	Quantity	%	Recycle/Salvage/Processing Company	On-site Handling Procedure
Concrete	0 tons	0		
Masonry & CMU	25 tons	82		
Ceramic Tile	0 tons	0		
Sheetrock	0 tons	0		
Metal Studs	0.5 tons	1.6		
Mixed	2.5 tons	8.2		
Garbage /Other	2.5 tons	8.2		

Page 2 of 6

Construction Phase (estimated quantities and percentages):

			Recycle/Salvage/Processing	
Material	Quantity	%	Company	On-site Handling Procedure
Wood Sheet Materials	45 tons	56		
Metals	2.7 tons	3		
Roofing	0 tons	0		
Carpet and pad	1 ton	1.5		
Gypsum board	2 tons	2.5		
Piping	0 tons	0		
Electrical Conduit	0 tons	0		
Packaging Materials	30 tons	37		
(cardboard, plastic,				
etc)				

Estimated Quantities for Salvaged, Recycled, or Disposal

	Salvaged/Recycled	Disposal
Demolition	80%	20%
Construction	80%	20%

SUBMITTALS

Bestway Carting Inc. will provide calculation and supporting documentation to demonstrate off site salvage/recycling rates meeting the goal of a minimum of 75% diversion from the landfill.

- The total weight in tons or cubic yards of all demolition waste material sent to the landfill will be documented.
- The total weight in tons or cubic yards of all demolition materials recycled or salvaged will be recorded.
- Receipts or other proof of facility reception of materials will be provided to EWH when the facility purchases or accepts the recycled or salvaged materials.
- 4. For materials separated for recycling off site E.W. Howell will obtain a letter from the processor Bestway Carting Inc. stating the average percentage of waste they recycle along with the listing of the receiving facilities/companies that will be purchasing or accepting the recycled or salvage materials.
- Bestway Carting Inc.will submit monthly waste management progress reports containing the following information:
 - A. Project title, name of company completing report, and dates of period covered by the report.

Page 3 of 6

- B. Report on the disposal of all jobsite waste, including:
 - Reused or salvaged materials. For each material, the following information is to be provided
 - a. Amount of material salvaged in tons or cubic yards
 - b. The dates removed from the jobsite
 - c. The receiving party

FINAL CALCULATION OF DEMOLITION & CONSTRUCTION WASTE DIVERSION

Final project wide demolition & construction waste diversion rate will be calculated as follows:

Total Demolition & Construction	X Tons	Total waste generated by
Waste		demolition & construction
Total Recycled	Y Tons	Materials diverted from the
		landfill by salvage, reuse and
		recycling
Diversion Rate	Y/(X +Y)%	Percentage of the project waste
		diverted from the landfill

V. COST/REVENUE ANALYSIS

Estimated Total Quantity of Waste: 134 tons	
Estimated Cost with CWM: S	
Estimated Cost without CWM:	
Estimated Revenue from Recycled Materials: 50	
Estimated Savings in Hauling & Tipping Fees: 20%	
Estimated Handling & Transpor <u>tation Co</u> sts: \$	
Estimated Savings from CWM: 20%	

VI. MEETINGS AND COMMUNICATION

The construction waste management plan will be reviewed at the kick off meeting prior to the mobilization and startup of each trade's work. Ongoing plan issues will be recorded via project meeting minutes as the project progresses.

VII. ATTACHMENTS

Bestway Carting Inc. Waste Management Plan Page 4 of 6 Bestway Carting Inc.

Since 1983 BIC # 280 Residential • Commercial • Construction Waste Removal

April 5, 2016

Construction Waste Management Plan

E.W. Howell Co., LLC Attn: Christine Schultz Job Site Location: P.S.49 - Middle Village, NY

E.W. Howell Co., LLC will be the responsible party for implementing the WMP. The project will utilize several options to meet the goal of diverting 75% of waste from a landfill or incinerator. Construction debris will be recycled, reused, salvaged or donated when options are available. If it is necessary to route debris to a landfill/incinerator, that material will be tracked as non-recyclable demolition debris.

Primary Waste Hauler:

The project's primary waste hauler will be Bestway Carting Inc. For all material picked up at P.S.49, Bestway Carting's Truck Driver will complete a 2 ply LEED ticket noting the contents of the container(s) in percentages showing the amounts of recycled and waste material. If available, a copy of this LEED ticket is given to an E.W.Howell Co., LLC representative or project Foreman at the job site if personnel are present at the time the load is picked up. The material is then hauled and dumped at a Transfer Station Facility. The Material Recovery Facility is as follows:

Recyclables will be separated at the Transfer Station. City Recycling receives commingled Construction and Demolition Debris {C&D} from numerous haulers and trucking companies in the New York City Metropolitan area. The commingled C&D debris which is received at the facility is separated on site by a team of hand pickers as well as machinery. The material is separated into several commodities which are then sent to recyclers of that commodity. The remainder of the C&D debris received which has not been diverted is then disposed of at an authorized landfill.

As each container of debris is emptied at City Recycling Transfer Station, a Gate Manager controlling the incoming traffic does a visual assessment of the contents being dumped and notates the percentages of the mixed material being dumped onto a LEED Recycling Report Form. Waste and Recyclables are recorded on this form in separate categories such as metal, cardboard, wood, concrete, waste, etc. These LEED Recycling Report Forms are transposed onto a Monthly Waste Management Report spreadsheet that calculates by weight or volume the material being recycled and/or disposed of at an authorized landfill.

The Monthly Waste Management Report is electronically sent to the Carting Company or General Contractor 5 business days following the reporting month.

49-60 Annadale Lane, Little Neck, NY 11362 Phone: 718-423-6473 Fax:718-281-9830



Page 5 of 6
City Recycling Transfer Station

Material Handling Facilities

Material	Name	Address	Facility Type
Demolition Mixed Waste	110Sand	120 Cabot Street W.Babylon, NY	LF
Wood-Tainted Waste	110 Sand	120 Cabot Street W.Babylon,NY	LF
Wood (clean)	Waste Mgmt	75 Thomas Street Brooklyn, NY	REC
Cardboard	Empire State	3 Railroad Place Maspeth, NY	Rec
Plastic	Empire State	3 Railroad Place Maspeth, NY	Rec
Paper	Empire State	123 Varick Avenue Brooklyn, NY 11237	Rec
Wood (clean)	CooperTank	222 Maspeth Avenue BrookJyn,NY 11211	Rec
Metal	Benson Scrap	543 Smith Street Brooklyn, NY	Rec
Metal	TNT	340 Maspeth Ave Brooklyn,NY	Rec
Metal	Sixth Street	163 6th Street Brooklyn,NY	Rec
Rock Dirt, Brick & Concrete	Vanbro	1900 South Avenue Staten Island, NY	Rec
Rock Dirt, Brick & Concrete	Durante Bros.	31-40 1231/1 Street Flushing, NY 11354	Rec

Page 6 of 6

L

EVIN	OWELL
-	501524-002-01
	1/11/17

SCA School Construction Authority

NYC Green Schools Rating System

Contractor: E.W. Howell Preparer: Molly Rooney Telephone:

 Address:
 63-80 80th Street, Middle Village, NY 11379

 LLW:
 089232

 Date:
 End of July 2016

Construction Waste Mangement

Credit M1.5R, M1.6 and M1.7

PS/IS 49Q

Project:

Table 1: Construction Waste Management diversion Summary

Diverted / Recycled Materials Description	Diversion / Recycling Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
Concrete	Bestway	0.00	Tons
Wood	Bestway	4.83	Tons
Gypsum Wallboard	Bestway	0.19	Tons
Masonry	Bestway	0.00	Tons
Crushed Asphalt	Bestway	0.00	Tons
Masonry	Bestway	14.71	Tons
Cardboard	Bestway	0.55	Tons
Other: Metal	Bestway	0.21	Tons
Other: Waste	Bestway	3.45	Tons
Other: Plastic	Bestway	1.47	Tons
Other:			
Other:			-
Other:	1 1		4
Other:	4		
Other:			
Other:			
Other:		1.2	
Other:			
Other:		1	
Other:			

TOTAL CONSTRUCTION WASTE DIVERTED 21.96

Landfill materials Description	Landfill Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
General Mixed Waste	Bestway	3.45	Tons
Other:			
Other:		100 million (1990)	
TOTAL CONSTRUCT	ION WASTE SENT TO LANDFILL	3.45	
TOTAL C	FALL CONSTRUCTION WASTE	25.41	
PERCENTAGE OF CONSTRUCTION WAS	TE DIVERTED FROM LANDFILL	86%	

05/01/09

Electronic copy of Form can be downloaded from SCA web site

Project Total as of end of July 2016

Construction Wa	iste Management M	onthly Tracking Form															
Project Name:	PS 49 Middle Village				Prepared	City Recycl	ling Transf	er Station		Verified by	E.W. Howell	-					
Project No.	widdle village				Title: Date:	Administrat 8/15/2016	tor			Title: Date:	Christine Solu	12					
			Materials	Container	Total										Weight of	Weight of	1
Ticket No.	Date	Waste Handler	Recipient	Volume (Cu. Yds)	Weight (Tons)					Recycled M	aterial				Recycled Material	Landfilled Materials	
						Wood	Metal	Gypsum	СМИ	Paper/ Cardboard	Fills/ Fines & Regrinds	Masonry	Rubbish	Plastic			
17486	7/19/2016	Bestway	City Recycling	N/A	2.05	1.54	0.00	0.00	0.00	0.10	0.00	0.10	0.21	0.10	1.85	0.21	2.05
21335 21340	7/21/2016	Bestway Bestway	City Recycling City Recycling	N/A N/A	0.83	0.58	0.08	0.00	0.00	0.00	0.00	0.00	0.04	0.12	0.79	0.04	0.83
21384	7/28/2016	Bestway	City Recycling	N/A	2.58	1.16	0.13	0.00	0.00	0.26	0.00	0.13	0.77	0.13	1.81	0.77	2.58
21385	7/29/2016	Bestway	City Recycling	N/A N/A	6.87	0.00	0.00	0.00	0.00	0.00	0.00	6.18	0.69	0.00	6.18	0.69	6.87
11431	112312010	Destway	City Necycling	1975	25.42	4.83	0.00	0.19	0.00	0.15	0.00	14.7	1.74	1.47	2.13	1.74	25.42
												Total RECYCL	ING % THI	S PERIOD	21.97	3.45 86%	25.42
TEL: 71	18-423-64	173	Mini & Roll 297 Norr Brooklyn, N	off Coloman Av	ntaine enue k 112	ers 22	F	AX: 7	1 18-28	7486 1-9830							
-		LEED	RECYC	LIN	GR	EP	OR	Г									
Custome	er Name:	er Hove	U				Date:	7.10	9-11	2							
Job Loca	ation: 6	3,30 8	B C	akr													
Ticket #:	~ 64h	901	Yards: 20			T	ons:	7.05	-								
Driver's	Name: Val	ert				17	Fruck #	# 18		-							
Name / Author	nized Signature:	By signing below	I agree to the co	ntent desc	ribed with	hin the bo	dy of %	of material	to be true	and correct							
x	MI		1														
	- M	OZ.	OF MATER		VOL	IME	-	_	-								
	5	10	OFMATER	ALDI	VOL	CME	1	V									
PLAS	STIC	% T	/	1		CARP	PET	X	%								
PAPE	RICARDB	OARD 5	ch.	1		CIEA	NWO	non T	15	0%							
- min	S		10		1	CLLM		~~	r								
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0 M	INOS/	1 70	1/			masi	E_/	-	70								
SHEE	T ROCK,	WALLBOAF	RD_	90		1											
BRIC	K, CONCR	ETE, MASO	ONRY 3		%		1										
ROOI	FING MAT	ERIAL	X	6			1										
INSTRU	JCTIONS: Est	imate the amou	nt or recyclable	s by volur	ne, Give	criver a	copy a	nd keep or	ne for the	office.	Ì						
			Contraction of the second)			·									
			DAW	N MANT	z												

Office: 718-599-6573 • Fax: 718-388-6184

Construction Waste Mangement Credit M1.5R, M1.6 and M1.7



NYC Green Schools Rating System

Project:	PS/IS 49Q
Address:	63-60 80th Street, Middle Village, NY 11379
LLW:	089232
Date:	End of August 2016

Contractor:	E.W. Howell
Preparer:	Molly Rooney
Telephone:	

Table 1: Construction Waste Management diversion Summary

Diverted / Recycled Materials Description	Diversion / Recycling Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
Concrete	Bestway	0.00	Tons
Wood	Bestway	7.24	Tons
Gypsum Wallboard	Bestway	1.45	Tons
Masonry	Bestway	0.00	Tons
Crushed Asphalt	Bestway	0.00	Tons
Masonry	Bestway	14.94	Tons
Cardboard	Bestway	1.21	Tons
Other: Metal	Bestway	1.10	Tons
Other: Waste	Bestway	5,67	Tons
Other: Plastic	Bestway	2.15	Tons
Other:			
Other:			*
Other:			
Other:			
Other:			
Other:		· · · · · · · · · · · · · · · · · · ·	
Other:			
	TOTAL CONSTRUCTION WASTE DIVERTED	28.09	

Landfill materials Description	Landfill Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
General Mixed Waste	Bestway	5.87	Tons
Other:			
Other:			
TOTAL CONSTRUCTION WA	5.67		

TOTAL OF ALL CONSTRUCTION WASTE	33.76	
PERCENTAGE OF CONSTRUCTION WASTE DIVERTED FROM LANDFILL	83%	

05/01/09

Electronic copy of Form can be downloaded from SCA web site

Project Total as of end of August 2016

Construction Was	te Management Mo	onthly Tracking Form															
Project Name:	PS 49				Prepared	City Recycli	ing Transfe	er Station		Verified by	E.W. Howell						
Project Location	Middle Village				Name: Title:	Dawn M. Ma Administrate	antz-Torre or	5		Name: Title:	Christine Schu	ltz					
Project No.				_	Date:	9/14/2016				Date:						_	
Ticket No.	Date	Waste Handler	Materials	Container Volume	Total Weight					Recycled M	aterial				Weight of Recycled	Weight of Landfilled	
			Recipient	(Cu. Yds)	(Tons)					,	1				Material	Materials	
						Wood	Metal	Gypsum	СМО	Cardboard	& Regrinds	Masonry	Rubbish	Plastic			
21387 21389	8/1/2016 8/3/2016	Bestway Bestway	City Recycling City Recycling	N/A N/A	1.72	0.43	0.00	0.60	0.00	0.09	0.00	0.09	0.34	0.17	1.38	0.34	1.72
20751	8/5/2016	Bestway	City Recycling	N/A	1.43	0.50	0.14	0.29	0.00	0.07	0.00	0.14	0.14	0.14	1.29	0.14	1.43
20754 21482	8/12/2016 8/22/2016	Bestway Bestway	City Recycling City Recycling	N/A N/A	2.99	0.16	0.00	0.16	0.00	0.32	0.00	0.00	0.80	0.16	0.80	0.80	1.60 2.99
		, <u> </u>			8.34	2.41	0.89	1.26	0.00	0.66	0.00	0.2	3 2.22	0.68	6.42	2.22	8.34
												RECYCL	ING % THI	S PERIOD	0.13	73%	0.34
	Si	nce 1983	-E	ST	W	10	-	1	14.0 1								
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			CA	LR1		NG					2138	7					
			Mini &	Rollof	f Col	ntaine	rs										
			297	Norma	n Av	enue		F	AX.	718-2	81-983	0					
TEL: 7	18-423-	6473	Brooki	yn, Nev	v Yor	k 112	22	-	AA.	110-2	01-000	-					
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Custom	er Name:	1	E W HOW	ELL				Date:	00	5/01,	116	-					
Job Loc	cation:	63-1	50 8	OST	a	EENS											
Tiekett	+	No	Yards:	in	1			Tons:	1.7	201							
TICKET	r. 6690	arx	Tarad	N			-	Truck	#-	20							
Driver's	s Name:	aga	ion	_	-			THE		14							
Name / Auth	orized Signati	ure: By signing	balow, I agree !	the conte	ent des	cribed wit	thin the	body of %	of mate	mai to be t	rue and cor	reu.					
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PL	STIC	10 Th)	/			CAL	RPET_	-	- %							
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PAI	PER/CAR	DBOARD	5	96			CLE	EAN W	OOD	d-	2 %						
		and should be		/						-							
ME	TAL	%)	1		SCE	EEEN F	INES		90						
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-	DISTROL	· Felinate the	amount or ra	cyclables	by yol	ume Gi	vadriv	er a copy	and ke	ep one fo	r the office						
INST	RUCTIONS	: Estimate the	amount of re	cyclastes	59 101	anne en	1	1									
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			-	DAW	MAN	NTZ											

Coordinator Office: 718-599-6573 • Fax: 718-388-6184

Constru Credit M1	ction Waste Mangement .5R, M1.6 and M1.7		5				
Project:	PS/IS 49Q						
Address:	63-60 80th Street, Middle Village, 1	63-60 80th Street, Middle Village, NY 11379					
LLW:							
Date:	End of September 2016		Te				

CA School Construction Authority

NYC Green Schools Rating System

ontractor: E.W. Howell Preparer: Molly Rooney

Telephone:

Table 1: Construction Waste Management diversion Summary

Diverted / Recycled Materials Description	Diversion / Recycling Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)	
Concrete	Bestway	0.00	Tons	
Wood	Bestway	11.09	Tons	
Gypsum Wallboard	Bestway	4.26	Tons	
Crushed Asphalt	Bestway	0,00	Tons	
Masonry	Bestway	18.12	Tons	
Cardboard	Bestway	2.87	Tons	
Other: Metal	Bestway	2.24	Tons	
Other: Waste	Bestway	7.13	Tons	
Other: Plastic	Bestway	3.72	Tons	
Other:		and the second s		
Other:			-	
Other:				
TOTAL CO	NSTRUCTION WASTE DIVERTED	42.30		

TOTAL CONSTRUCTION WASTE DIVERTED

Landfill materials Description	Landfill Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
General Mixed Waste	Bestway	7.13	Tons
Other:			
Other:			
TOTAL CONSTRUCTIO	7.13		
TOTAL OF	49.43		
PERCENTAGE OF CONSTRUCTION WAST	86%		

05/01/09

Electronic copy of Form can be downloaded from SCA web site

Project Total as of end of August 2016

Prepared I City Recycling Transfer Station Name: Dawn M. Mantz-Torres

Construction Waste Manag ment Monthly Tracking Form

Project Name: PS 49 Project Location Middle Village

Project No.					Title: Date:	Administrat 10/10/2016	tor i			Title: Date:							
Ticket No.	Date	Waste Handler	Materials Recipient	Container Volume (Cu. Yds)	Total Weight (Tons)		Recycled Material Weight of Weigh Recycled Landfi Material Materia					Weight of Landfilled Materials	<i>.</i>				
						Wood	Metal	Gypsum	СМО	Paper/ Cardboard	Fills/ Fines & Regrinds	Masonry	Rubbish	Plastic			
21502	9/1/2016	Bestway	City Recycling	N/A	1.53	0.38	0.00	0.54	0.00	0.08	0.00	0.08	0.31	0.15	1.22	0.31	1.53
21525	9/13/2016	Bestway	City Recycling	N/A	2.20	0.22	0.00	0.22	0.00	0.00	0.00	1.32	0.22	0.22	1.98	0.22	2.20
21536	9/19/2016	Bestway	City Recycling	N/A	1.29	0.65	0.13	0.13	0.00	0.13	0.00	0.00	0.13	0.13	1.16	0.13	1.29
21631	9/22/2016	Bestway	City Recycling	N/A	2.47	0.86	0.25	0.49	0.00	0.12	0.00	0.25	0.25	0.25	2.22	0.25	2.47
21663	9/29/2016	Bestway	City Recycling	N/A	5.11	0.51	0.00	1.28	0.00	1.02	0.00	1.53	0.26	0.51	4.85	0.26	5.11
21711	9/30/2016	Bestway	City Recycling	N/A	3.07	1.23	0.77	0.15	0.00	0.31	0.00	0.00	0.31	0.31	2.76	0.31	3.07
					15.67	3.85	1.14	2.81	0.00	1.66	0.00	3.18	1.46	1.57			15.67

Total RECYCLING % THIS PERIOD 14.21 15.67

1.46

Since 1983 BIC #280

TEL: 718-423-6473

х





Verified by E.W. Howell Name: Christine Schultz

CARTING Mini & Rolloff Containers 49-60 Annandale Lane

Little Neck, New York 11362 FAX: 718-281-9830

LEED RECYCLING REPORT Customer Name: Date: 0 IM 1 2016 4 Job Location: N TL 2 17 Ticket #: Yards: IU Tons: 3 2 Driver's Name: Truck #:

Name / Authorized Signature: By signing below, I agree to the content described within the body of % of material to be true and correct.

CARDET /
CARPET %
CLEAN WOOD
SCREEN FINES %
WASTE 20 %
2
Give driver a copy and keep one for the office



	OWELL
a series a	\$01524-005-001 1/11/17

SCA School Construction Authority

NYC Green Schools Rating System

Project:	PS/IS 49Q
Address:	63-60 80th Street, Middle Village, NY 11379
LLW:	
Date:	End of October 2016

Construction Waste Mangement

Credit M1.5R, M1.6 and M1.7

Contractor: E.W. Howell Preparer: Molly Rooney

Telephone:

Table 1: Construction Waste Management diversion Summary

Diverted / Recycled Materials Description	Diversion / Recycling Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
Concrete	Bestway	0.00	Tons
Wood	Bestway	20.11	Tons
Gypsum Wallboard	Bestway	8.42	Tons
Crushed Asphalt	Bestway	0.00	Tons
Masonry	Bestway	21.42	Tons
Cardboard	Bestway	5.43	Tons
Other: Metal	Bestway	2.43	Tons
Other: Waste	Bestway	11.18	Tons
Other: Plastic	Bestway	6.51	Tons
Other:			
Other:			1
Other:			
Other:			1
Other:			
Other:	TAL CONSTRUCTION WASTE CHUCOTES	84.33	

Landfill materials Description	Landfill Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
General Mixed Waste	Bestway	11.18	Tons
Other:			
Other:			
TOTAL CONSTRUCTIO	11.18		
TOTAL OF	ALL CONSTRUCTION WASTE	75.50	
PERCENTAGE OF CONSTRUCTION WAST	85%	a	

05/01/09

Electronic copy of Form can be downloaded from SCA web site

Project Total as of end of October 2016

Construction Waste Management Monthly Tracking Form

Project Name: Project Location Project No.	PS 49 Middle Village				Prepared Name: Title: Date:	City Recyc Dawn M. M Administra 11/15/2016	ling Transf Mantz-Torre tor 8	er Station s		Verified by Name: Title: Date:	E.W. Howell Christine Schult	z					
Ticket No.	Date	Waste Handler	Materials Recipient	Container Volume (Cu. Yds)	Total Weight (Tons)					Recycled Ma	aterial				Weight of Recycled Material	Weight of Landfilled Materials	
						Wood	Metal	Gypsum	СМО	Paper/ Cardboard	Fills/ Fines & Regrinds	Masonry	Rubbish	Plastic			
21532	10/5/2016	Bestway	City Recycling	N/A	4.18	1.05	0.00	1.46	0.00	0.21	0.00	0.21	0.84	0.42	3.34	0.84	4.18
21591	10/10/2016	Bestway	City Recycling	N/A	1.92	0.19	0.19	0.38	0.00	0.19	0.00	0.00	0.77	0.19	1.15	0.77	1.92
21632	10/14/2016	Bestway	City Recycling	N/A	2.02	0.20	0.00	0.20	0.00	0.00	0.00	1.21	0.20	0.20	1.82	0.20	2.02
21669	10/18/2016	Bestway	City Recycling	N/A	1.81	0.45	0.00	0.18	0.00	0.54	0.00	0.09	0.18	0.36	1.63	0.18	1.81
21789	10/20/2016	Bestway	City Recycling	N/A	5.32	2.66	0.00	0.53	0.00	0.53	0.00	0.53	0.53	0.53	4.79	0.53	5.32
21805	10/26/2016	Bestway	City Recycling	N/A	6.27	2.19	0.00	0.94	0.00	0.63	0.00	1.25	0.63	0.63	5.64	0.63	6.27
17008	10/28/2016	Bestway	City Recycling	N/A	4.54	2.27	0.00	0.45	0.00	0.45	0.00	0.00	0.91	0.45	3.63	0.91	4.54
	_	-			26.06	9.02	0.19	4.16	0.00	2.56	0.00	3.30	4.05	2.79			26.06



Mini & Rolloff Containers

49-60 Annandale Lane Little Neck, New York 11362 FAX: 718-281-9830 TEL: 718-423-6473

LEED RECYCLING REPORT					
Customer Name: EW	towell	Date: 10 516			
Job Location: (03-4	D 8015				
Ticket#: 683041	Yards: 10	Tons: 4,/8 <			
Driver's Name:		Truck #:			

Name / Authorized Signature: By signing below, I agree to the content described within the body of % of material to be true and correct. х

VOLUME
CARPET <u>%</u> CLEAN WOOD <u>} %</u> SCREEN FINES <u>%</u>
WASTE
e. Give driver a copy and keep one for the office

Office: 718-599-6573 . Fax: 718-388-6184

 Total
 22.01

 RECYCLING % THIS PERIOD

26.06

4.05

Constru Credit M1	ction Waste Mangement .5R, M1.6 and M1.7	However How	SCA School Construction Authority
Project:	PS/IS 49Q		
Address:	63-60 80th Street, Middle Village, NY	11379	Contractor: E.W. Howell
LLW:			Preparer. Molly Rooney
Date:	End of November 2016		Telephone:

Table 1: Construction Waste Management diversion Summary

Diverted / Recycled Materials Description	Diversion / Recycling Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
Concrete	Bestway	0.00	Tons
Wood	Bestway	26.15	Tons
Gypsum Wallboard	Bestway	11.42	Tons
Crushed Asphalt	Bestway	0.00	Tons
Masonry	Bestway	30.42	Tons
Cardboard	Bestway	7.45	Tons
Other: Metal	Bestway	3.93	Tons
Other: Waste	Bestway	16.79	Tons
Other: Plastic	Bestway	9.53	Tons
Other:			
Other:			-
Other:			
Other:		99.00	

Landfill materials Description	Landfill Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
General Mixed Waste	Bestway	16.79	Tons
Other:			
Other:		1	
TOTAL CONSTRUCTION	N WASTE SENT TO LANDFILL	16.79	
TOTAL OF	105.69		
PERCENTAGE OF CONSTRUCTION WAST	84%		

05/01/09

Electronic copy of Form can be downloaded from SCA web site

Project Total as of end of November 2016

	Construction Was	ste Management Mo	onthly Tracking Form															
Paretti Dr. Dr. Dr. Street Dr. 1 Under Handter Marching Variateria Variat	Project Name: Project Location	PS 49 Middle Village				Prepared Name: Title:	City Recyc Dawn M. M	ling Transf Mantz-Torre	er Station s		Verified by Name: Title:	E.W. Howell Molly Rooney						
Titles No. Das Wards Reader Description Wards Reader Option of the second state of the second stat	Project No.					Date:	12/21/201	8			Date:							
Image: construction	Ticket No.	Date	Waste Handler	Materials Recipient	Container Volume	Total Weight					Recycled M	laterial				Weight of Recycled Material	Weight of Landfilled Materials	[
				II	(ou. rus)	(rons)	Wood	Metal	Gypsum	СМU	Paper/	Fills/ Fines	Masonry	Rubbish	Plastic		materials	
11162 111262016 Bestewy Cop Recycling 144 456 241 0.0 0.00 0.00 0.00 100 100 </td <td>21688</td> <td>11/7/2016</td> <td>Bestway</td> <td>City Recycling</td> <td>N/A</td> <td>10.37</td> <td>> 3.63</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.52</td> <td>0.00</td> <td>1.56</td> <td>3.63</td> <td>1.04</td> <td>6.74</td> <td>3.63</td> <td>10.37</td>	21688	11/7/2016	Bestway	City Recycling	N/A	10.37	> 3.63	0.00	0.00	0.00	0.52	0.00	1.56	3.63	1.04	6.74	3.63	10.37
1010 100	111016 21863	11/10/2016	Bestway	City Recycling	N/A N/A	4.82	2.41	0.00	0.00	0.00	0.00	0.00	1.45	0.48	0.48	4.34	0.48	4.82
	21000	1112012010	Dooting	only receipting		30.19	6.04	1.50	3.00	0.00	2.02	2 0.00	9.00	5.61	3.02	2	1.00	30.19
Job Location: 63.60 80 sr QUEENS Ticket #: 689,467 Yards: A0 Tons: 10.37 res Driver's Name: ZENON Truck #: 22 Name: ZENON Truck #: 22 Name: ZENON Truck #: 22 Name: Authorized Signature: By signing below, I agree to the content described within the body of % of material to be true and correct. X ************************************	TEL: 71	Since BIC # 8-423-647	а 1983 2280 73 в ЕЕЕД Г <i>F. W. Ho</i>	SEST CAR Mini & Rolla 297 Norm Trooklyn, Ne RECYC	TTTT an Aver W York LINC	A Solution		FA. DRT	X: 718	Sam 21(-281-4	^{ple} 388 9830		RECYCLI	NG % THI	<u>S PERIO</u>	<u>,</u>	81%	
Ticket #: 689.967 Yards: 20 Tons: 10.37mm Driver's Name: Image: 1000 Image: 1000 Image: 1000 Name (Authorized Signature: By signing below, I agree to the content deactived within the body of % of material to be true and correct. X Image: 1000 Image: 1000 Image: 1000 Y OF MATERIAL BY VOLUME PLASTIC % CARPET % PAPER/CARDBOARD % CLEAN WOOD 35 % METAL % SCREEN FINES % 6'' MINUS % WASTE 3.5 % SHEET ROCK, WALLBOARD % WASTE 3.5 % BRICK, CONCRETE, MASONRY 15 % More a copy and keep one for the office. INSTRUCTIONS: Estimate the amount or recyclables by volume. Give driver a copy and keep one for the office. Image: Additional content is a copy and keep one for the office.	Job Locat	tion:	63.60	80 57	QUEE	ENS	1-				_							
Unver's Name: Index #. 22 Name (Authorized Signature: By signing below, Lagree to the content described within the body of % of material to be true and correct. X % OF MATERIAL BY VOLUME PLASTIC % % OF MATERIAL BY VOLUME PAPER/CARDBOARD % % CARPET % CARPET % CLEAN WOOD 3.5 % METAL % % SCREEN FINES % WASTE 3.5 % SHEET ROCK, WALLBOARD % % WASTE BRICK, CONCRETE, MASONRY /5 % NSTRUCTIONS: Estimate the amount or recyclables by volume. Give driver a copy and keep one for the office.	Ticket #:	68926	7 Y	ards:	20	_	To	ns:	10.37	Tran	-							
Name / Authorized Signature: By signing below, I agree to the content described within the body of % of material to be true and correct. X % OF MATERIAL BY VOLUME PLASTIC % CARPET % PAPER/CARDBOARD % CLEAN WOOD 35 METAL % SCREEN FINES % G' MINUS % % WASTE SHEET ROCK, WALLBOARD % BRICK, CONCRETE, MASONRY 15 ROOFING MATERIAL % INSTRUCTIONS: Estimate the amount or recyclables by volume. Give driver a copy and keep one for the office.	Driver's N	Name:	ZENON				110	JCK #.	22									
Cor Material BY VOLUME PLASTIC % PAPER/CARDBOARD % CLEAN WOOD 35 % METAL % 6" MINUS % SHEET ROCK, WALLBOARD % BRICK, CONCRETE, MASONRY 15 % INSTRUCTIONS: Estimate the amount or recyclables by volume. Give driver a copy and keep one for the office.	Name / Authoriz	zed Signature: B	y signing below,	agree to the con	tent describ	ed within	the body	of % of r	naterial to b	e true an	d correct.							
PLASTIC % CARPET % PAPER/CARDBOARD % CLEAN WOOD 35 % METAL % SCREEN FINES % 6" MINUS % WASTE 35 % SHEET ROCK, WALLBOARD % WASTE 35 % BRICK, CONCRETE, MASONRY 15 % ROOFING MATERIAL % 1000000000000000000000000000000000000		/	<u>% (</u>	OF MATERI	ALBY	VOLU	ME											
PAPER/CARDBOARD 5 % METAL % SCREEN FINES 6" MINUS % WASTE 3.5 % SHEET ROCK, WALLBOARD % BRICK, CONCRETE, MASONRY 15 % ROOFING MATERIAL % INSTRUCTIONS: Estimate the amount or recyclables by volume. Give driver a copy and keep one for the office.	PLAS	TIC	2%			c	CARPE	T	- %	2								
METAL % 6" MINUS % WASTE 3.5 SHEET ROCK, WALLBOARD % BRICK, CONCRETE, MASONRY 1.5 ROOFING MATERIAL % INSTRUCTIONS: Estimate the amount or recyclables by volume. Give driver a copy and keep one for the office.	PAPE	R/CARDBO	DARD	5 %		C	LEAN	woo	D3	2	%							
6" MINUS% WASTE% SHEET ROCK, WALLBOARD% BRICK, CONCRETE, MASONRY% ROOFING MATERIAL% INSTRUCTIONS: Estimate the amount or recyclables by volume. Give driver a copy and keep one for the office.	META	AL	9/0			S	CREE	N FIN	ES		%							
SHEET ROCK, WALLBOARD	6" MI	NUS	%	1		v	VASTE	3_3	5 %	2								
BRICK, CONCRETE, MASONRY 15 % ROOFING MATERIAL % INSTRUCTIONS: Estimate the amount or recyclables by volume. Give driver a copy and keep one for the office.	SHEE'	T ROCK, W	ALLBOAR	D	90													
ROOFING MATERIAL% INSTRUCTIONS: Estimate the amount or recyclables by volume. Give driver a copy and keep one for the office.	BRICH	K, CONCR	ETE, MASC	NRY_/	5 9	é												
INSTRUCTIONS: Estimate the amount or recyclables by volume. Give driver a copy and keep one for the office.	ROOF	ING MATE	ERIAL	- %	2		1											
	INSTRU	CTIONS: Esti	mate the amoun	at or recyclables	by volume	e. Give d	lriver a c	opy and	keep one	for the of	ffice.							

Office: 718-599-6573 • Fax: 718-388-6184

Constru Credit M	ction Waste Mangement I.5R, M1.6 and M1.7		SCA School Construction Authority
Project:	PS/IS 49Q		
Address:	63-60 80th Street, Middle Village, NY 113	379	Contractor: E.W. Howell
LLW:			Preparer: Molly Rooney
Date:	End of December 2016		Telephone:

Table 1: Construction Waste Management diversion Summary

Diverted / Recycled Materials Description	Diversion / Recycling Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
Concrete	Bestway	0.00	Tons
Wood	Bestway	34.33	Tons
Gypsum Wallboard	Bestway	12.93	Tons
Crushed Asphalt	Bestway	0.00	Tons
Masonry	Bestway	50.62	Tons
Cardboard	Bestway	9.55	Tons
Other: Metal	Bestway	4,82	Tons
Other: Waste	Bestway	24.03	Tons
Other: Plastic	Bestway	11.35	Tons
Other:			
Other:			
Other:		1	
Other:			
Other:			
Other:			
Other:		· · · · · · · · · · · · · · · · · · ·	
Other:		H	
Other:			
Other:	a second a la seconda seconda de la seconda de		
	TOTAL CONSTRUCTION WASTE DIVERTED	123.60	5

Landfill materials Description	Landfill Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)		
General Mixed Waste	Bestway	24.03	Tons		
Other:					
Other:	Management of the second of				
TOTAL CONSTRUCTION W	ASTE SENT TO LANDFILL	24.03	_		

TOTAL OF ALL CONSTRUCTION WASTE	147.63	
PERCENTAGE OF CONSTRUCTION WASTE DIVERTED FROM LANDFILL	84%	

05/01/09

Electronic copy of Form can be downloaded from SCA web site

Project Total as of end of December 2016

City F	Recyclin	g Transfe	er Statio	n 151 Antho	ony S	treet Brooklyn	, NY 1122	2 Tel.#	718-599-(6573 Fax.#	718-388-	6473				
Construction V Project Name: Project Locatio Project No.	Vaste Management I PS 49 n Middle Village	lonthly Tracking Form		Pre Na Titi Dal	epared me: le: te:	City Recycling Transf Dawn M. Mantz-Torre Administrator 1/10/2017	er Station		Verified by Name: Title: Date:	E.W. Howell Molly Rooney						
Ticket No.	Date	Waste Handler	Materials Recipient	Container T Volume W (Cu. Yds) (T	iotal eight ions)				Recycled M	aterial				Weight of Recycled Material	Weight of Landfilled Materials	
21747	12/16/2016	Bestway	City Recycling	N/A 1	1.82	Wood Metal 1.77 0.00	Gypsum 0.00	СМU 0.00	Paper/ Cardboard 0.59	Fills/ Fines & Regrinds 0.00	Masonry 7.09	Rubbish 1.77	Plastic 0.59	10.05	1.77	11.82
21045 21908	12/23/2015 12/29/2017	Bestway Bestway	City Recycling City Recycling	N/A 1 N/A 1	2.26	5.52 0.00 0.89 0.89	0.61	0.00	0.61	0.00	0.61	3.68	1.23	8.58 16.07	3.68 1.79	12.26 17.85
TEL: 7	BIC 1	73 Br	297 Norma ooklyn, New	Containe n Avenue y York 1122		FAX: PORT	5an 718-28	¹¹⁷⁴	7							
Custom	er Name:	sin Houel	1			Date: 12	-16-11	0	1							
Job Loo	ation: 63	-60 80 4	e ciks		_		-	_	_							
Ticket #	696	543 Ya	irds: 20		_	Truck #: . /	82	-	-							
Driver s	Name: VP		agree to the conte	nt described with	hin the	body of % of mat	erial to be tru	ue and co	rect.							
x V	N								-							
PLA PAP ME	STIC_5 ER/CARDB	%0 %0 %0 %	/ <u>%</u>	LBT VOL	CAI CLI SCF	RPET	15 15 X	<u>%</u>								
6" M SHE	INUS	WALLBOARI	X	%	WA	STE_ <u>15</u>	%									
BRIG	CK, CONCE	ERIAL	NRY 60 %	%		1										
INSTR	RUCTIONS: Est	timate the amount	or recyclables b	y volume. Giv	e drive	er a copy and ke	ep one for t	the office								

Office: 718-599-6573 • Fax: 718-388-6184





Construction Waste Mangement

Credit M1.5R, M1.6 and M1.7

Contractor: E.W. Howell Preparer: Molly Rooney

Telephone:

Table 1: Construction Waste Management diversion Summary

Diverted / Recycled Materials Description	Diversion / Recycling Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
Concrete	Bestway	0.00	Tons
Wood	Bestway	64.69	Tons
Gypsum Wallboard	Bestway	23.89	Tons
Crushed Asphalt	Bestway	0.00	Tons
Masonry	Bestway	104.76	Tons
Cardboard	Bestway	20.69	Tons
Other: Metal	Bestway	8.66	Tons
Other: Waste	Bestway	44.12	Tons
Other: Plastic	Bestway	20.02	Tons
Other:		· · · · · · · · · · · · · · · · · · ·	
Other:	46.4	P	
Other:			
Other:		1	
Other:			
Other:	14 1 1		
Other:			
Other:			A
Other:			1
Other:			P
	TOTAL CONSTRUCTION WASTE DIVERTED	242.71	

Landfill materials Description	Landfill Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
General Mixed Waste	Bestway	44.12	Tons
Other:			
Other:	Constant Constant		
TOTAL CONSTRUCTION	WASTE SENT TO LANDFILL	44.12	
TOTAL OF	286.83		
PERCENTAGE OF CONSTRUCTION WASTE	85%		

05/01/09

Electronic copy of Form can be downloaded from SCA web site

Project Total as of end of January 2017

Construction Waste Management Monthly Tracking Form

TEL: 718-423-6473

Project Name: PS 49 Project Location Middle Village

Project No.

Prepared I City Recycling Transfer Station Name: Dawn M. Maniz-Torres Title: Administrator Date: 2/7/2017

Verified by E.W. Howell Name: Molly Rooney Title: Date:

Ticket No.	Date	Waste Handler	Materials Recipient	Container Volume (Cu. Yds)	Total Weight (Tons)		Recycled Material							Weight of Recycled Material	Weight of Landfilled Materials	
						Wood	Metal	Gypsum	CMU	Paper/ Cardboard	Fills/ Fines & Regrinds	Masonry	Rubbish	Plastic	1000	
21708	1/2/2017	Bestway	City Recycling	N/A	6.09	1.22	0.00	0.00	0.00	2.74	0.00	0.00	1.52	0.61	4.57	1.52
21040	1/3/2017	Bestway	City Recycling	N/A	8.83	1.77	0.00	2.65	0.00	0.88	0.00	1.77	0.88	0.88	7.95	0.88
21022	1/10/2017	Bestway	City Recycling	N/A	11.71	1.17	0.00	-1.17	0.00	0.59	0.00	7.03	1.17	0.59	10.54	1.17
21915	1/12/2017	Bestway	City Recycling	N/A	9.30	1.40	1.86	3.72	0.00	0.00	0.00	1.86	0.47	0.00	8.84	0.47
21700	1/13/2017	Bestway	City Recycling	N/A	5.54	2.22	0.28	0.55	0.00	0.28	0.00	0.00	1.66	0.55	3.88	1.66
21026	1/16/2017	Bestway	City Recycling	N/A	17.81	2.67	0.00	0.00	0.00	0.89	0.00	13.36	0.00	0.89	17.81	0.00
21160	1/17/2017	Bestway	City Recycling	N/A	17.85	1.79	0.00	0.89	0.00	0.89	0.00	12.50	0.89	0.89	16.96	0.89
21112	1/18/2017	Bestway	City Recycling	N/A	10.96	1.10	0.00	0.00	0.00	1.10	0.00	6.58	1.10	1.10	9.86	1.10
21030	1/20/2017	Bestway	City Recycling	N/A	13.97	2.10	0.14	0.84	0.00	0.70	0.00	7.96	1.96	0.28	12.01	1.96
21114	1/23/2017	Bestway	City Recycling	N/A	10.83	3.25	0.54	0.00	0.00	0.54	0.00	1.62	4.33	0.54	6.50	4.33
21704	1/24/2017	Bestway	City Recycling	N/A	6.21	2.48	0.31	0.62	0.00	0.62	0.00	0.31	1.24	0.62	4.97	1.24
21705	1/25/2017	Bestway	City Recycling	N/A	5.19	2.08	0.26	0.52	0.00	0.26	0.00	0.00	1.56	0.52	3.63	1.56
30063	-1/28/2017	Bestway	City Recycling	N/A	5.83	3.50	0.00	0.00	0.00	0.29	0.00	1.17	0.58	0.29	5.25	0.58
21706	1/31/2017	Bestway	City Recycling	N/A.	9.10	3.64	0.46	0.00	0.00	1.37	0.00	0.00	2.73	0.91	6.37	2.73
			1		139.22	30.36	3.84	10.96	0.00	11.14	0.00	54.14	20.09	8.67		
												Total			119.13	20.09
												RECYCLI	NG % THIS	S PERIOD		86%

RECYCLING % THIS PERIOD 86%





Ar



Sample

FAX: 718-281-9830

21708

CARTING Mini & Rolloff Containers

297 Norman Avenue

TEL: 718-423-6473	Brooklyn, New York 11222	FAX: 718-281-983
LEE	D RECYCLING REI	PORT
Customer Name:	EW HOUSELL	Date: 01/02/17
Job Location: 63	60 80st QUEERS	
Ticket #: 704579	Vards: 20	Tons: 6.09 rors
Driver's Name: Ze	THON	Truck #: 22

Name / Authorized Signature: By signing below, I agree to the content described within the body of % of material to be true and correct X

% OF MATERIAL BY VO	LUME		
PLASTIC %	CARPET	9%	
PAPER/CARDBOARD 45 %	CLEAN WOOD_	20	9%
METAL%	SCREEN FINES_	-	%
6" MINUS%	WASTE 25	90	
SHEET ROCK, WALLBOARD %			
BRICK. CONCRETE, MASONRY%			
ROOFING MATERIAL%			





 Project:
 PS/IS 49Q
 Street

 Address:
 63-60 80th Street, Middle Village, NY 11379
 LLW:

 Date:
 End of February 2017

Construction Waste Mangement

Credit M1.5R, M1.6 and M1.7

Contractor: E.W. Howell Preparer: Molly Rooney

Telephone:

Table 1: Construction Waste Management diversion Summary

Diverted / Recycled Materials Description	Diversion / Recycling Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
Concrete	Bestway	0.00	Tons
Wood	Bestway	81,75	Tons
Gypsum Wallboard	Bestway	23.89	Tons
Crushed Asphalt	Bestway	0.00	Tons
Masonry	Bestway	129.49	Tons
Cardboard	Bestway	25.77	Tons
Other: Metal	Bestway	9.59	Tons
Other: Waste	Bestway	51.83	Tens
Other Plastic	Bestway	23.77	Tons
Other:			
Other,			
Other:			
Other.			- 11
Other			
Other:			
Other.		204.28	4

dfill Hauler or Location	Diverted / Recycled Waste	(tons or cubic yards)
Bestway	51.83	Tons
	· · · · · · · · · · · · · · · · · · ·	e
SENT TO LANDFILL	51.83 🔶	
	hdfill Hauler or Location Bestway SENT TO LANDFILI	Indfill Hauler or Location Diverted () Recycled Waste Bestway 51.83 SENT TO LANDFILL 51.83

TOTAL OF ALL CONSTRUCTION WASTE	346.09	<	
PERCENTAGE OF CONSTRUCTION WASTE DIVERTED FROM LANDFILL	85%	~	

05/01/09

Electronic copy of Form can be downloaded from SCA web site

Project Total as of end of February 2017.xls

City Recycling Transfer Station 151 Anthony Street Brooklyn, NY 11222 Tel.# 718-599-6573 Fax.# 718-388-6473 - Construction Waste Management Monthly Tracking Form

Project Name: Project Location Project No.	PS 49 Middle Village				Prepared Name: Title: Date:	Dawn M. N Administra 3/15/2017	ling Transfe Aantz-Torre stor	er Station Is		Verified by Name: Title: Date:	E.W. Howell Molly Rooney						
Ticket No.	Date	Waste Handler	Materials Recipient	Container Volume (Cu. Yds)	Total Weight (Tons)	t				Recycled M	aterial				Weight of Recycled Material	Weight of Landfilled Materials	
						Wood	Metal	Gypsum	CMU	Paper/	Fills/ Fines &	Masonry	Rubbish	Plastic	1		
30007	2/6/2017	Bestway	City Recycling	N/A	8.99	2.70	0.45	0.00	0.00	0.90	0.00	3.60	0.90	0.45	8.09	0.90	8.99
30076	2/9/2017	Bestway	City Recycling	N/A	8.09	0.81	0.00	0.00	0.00	1.21	0.00	4.85	0.81	0.40	7.28	0.81	8.09
30111 30015	2/13/2017 2/16/2017	Bestway	City Recycling City Recycling	N/A N/A	2.23	2.37	0.00	0.00	0.00	0.00	0.00	0.67	1.19	1.19	10.67	1.19	11.85
30083	2/18/2017	Bestway	City Recycling	N/A	8.75	1.75	0.00	0.00	0.00	0.44	0.00	5.25	0.88	0.44	7.88	0.88	8.75
30019	2/22/2017	Bestway	City Recycling	N/A	7.43	2.97	0.37	0.00	0.00	1.11	0.00	1.49	1.11	0.37	6.32	1.11	7.43
30109	2/24/2017	Bestway	City Recycling City Recycling	N/A N/A	3.49	1.00	0.00	0.00	0.00	0.45	0.00	0.67	1.34	0.45	2.44	1.34	4.46
30222	2/28/2017	Bestway	City Recycling	N/A	3.98	3.18	0.00	0.00	0.00	0.40	0.00	0.40	0.00	0.00	3.98	0.00	3.98
					59.2	7 17.06	0.93	3 ⁻ 0.00	0.00	5.08	³ 0.00	24.73 Total	7.71	3.75	51.56	7.71	59.27 59.27
TEL: 71	BIC # 8-423-647	280 B	ART ini & Rolloff 297 Norman ooklyn, New	Contai Avenu York 1	G ners e 1222	An an	FAX:	718-28	ample 300 31-98	07							
	L	EED R	ECYCL	ING	RE	POR	RL T										
Customer	Name:	EW Ha	Mell			Date:	2	-6-1	7	-							
Job Locat	tion: GZ	5-608	<i>p</i> ³	_	_					_							
Ticket #:	7050	74 Ya	rds: 20	>		Tons:	8.	99		_							
Driver's N	lame:	C	hick			Truck	C#: ,	2									
Name / Authoriz	zed Signature: B	y signing below, I a	agree to the conten	t described	within th	e body of t	% of mate	erial to be tri	ue and co	rrect.							
PAF	F PER/CARD	% OF M	MATERIA 5_% 5_%	CLE/ SCR WAS	VOL AN W EEN 1	OOD_	30	%									
	6'	MINUS	MCRETE, N	IASON	RY 4	fð	%										
INSTRU	CTIONS: Estir	nate the amount	or recyclables by	volume. C	live driv	ver a copy	y and kee	ep one for t	he office	2.							

Coordinator Office: 718-599-6573 • Fax: 718-388-6184

Construe Credit M1	ction Waste Mangement .5R, M1.6 and M1.7 PS//S 490	Streets rationersey ISA Flowerse Commission Commission Commission Subsense - Solis24-010-001 4/20/17
Address	63-60 80th Street Middle Village 1	JY 11379
1 1001 000.	co co controlicer, initiale i inage, i	in more



School Construction Authority NYC Green Schools Rating System

Contractor: E.W. Howell Preparer: Molly Rooney Telephone:

Table 1: Construction Waste Management diversion Summary

Diverted / Recycled Materials Description	Diversion / Recycling Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
Concrete	Bestway	0.00	Tons
Wood	Bestway	96.79	Tons
Gypsum Wallboard	Bestway	23,89	Tons
Crushed Asphalt	Bestway	0.00	Tons
Masonry	Bestway	147.81	Tons
Cardboard	Bestway	30.35	Tons
Other: Metal	Bestway	9.59	Tons
Other: Waste	Bestway	60.01	Tons
Other: Plastic	Bestway	28.78	Tons
Other:			
Other:	the second of the second second		
	TOTAL CONSTRUCTION WASTE DIVERTED	337.21	1 · · · · · · · · · · · · · · · · · · ·

Quantity of Units Landfill Hauler or Landfill materials Description Diverted / (tons or cubic Location **Recycled Waste** yards) 60.01 General Mixed Waste Bestway Tons Other: Other: TOTAL CONSTRUCTION WASTE SENT TO LANDFILL 60.01

 TOTAL OF ALL CONSTRUCTION WASTE	397.22	
PERCENTAGE OF CONSTRUCTION WASTE DIVERTED FROM LANDFILL	85%	

05/01/09

LLW:

Date:

End of March 2017

Electronic copy of Form can be downloaded from SCA web site

Project Total as of end of March 2017

Construction Waste Management Monthly Tracking Form -

Project Name:	PS 45
Project Location	Middle Village

Project No.

Prepared I City Recycling Transfer Station Name: Dawn M. Mantz-Torres Title: Administrator Date: 4/15/2017

Verified by E.W. Howell Name: Molly Rooney Title: Date:

Ticket No.	Date	Waste Handler	Materials Recipient	Container Volume (Cu. Yds)	Total Weight (Tons)		Recycled Material							Weight of Recycled Material	Weight of Landfilled Materials		
						Wood	Metal	Gypsum	CMU	Paper/ Cardboard	Fills/ Fines & Regrinds	Masonry	Rubbish	Plastic			
30272	3/3/2017	Bestway	City Recycling	N/A	6.19	2.48	0.00	0.00	0.00	0.00	0.00	2.48	0.00	1.24	6.19	0.00	6.19
30275	3/8/2017	Bestway	City Recycling	N/A	6.85	2.06	0.00	0.00	0.00	0.69	0.00	1.71	1.71	0.69	5.14	1.71	6.85
30030	3/10/2017	Bestway	City Recycling	N/A	5.75	1.73	0.29	0.00	0.00	0.86	0.00	0.58	1.44	0.86	4.31	1.44	5.75
30343	3/11/2017	Bestway	City Recycling	N/A	10.50	2.10	0.00	0.00	0.00	1.58	0.00	4.20	1.05	1.58	9.45	1.05	10.50
30290	3/20/2017	Bestway	City Recycling	N/A	3.77	2.26	0.00	0.00	0.00	0.38	0.00	0.19	0.75	0.19	3.02	0.75	3.77
30034	3/22/2017	Bestway	City Recycling	N/A	6.11	1.22	0.61	0.00	0.00	0.61	0.00	0.92	2.44	0.31	3.67	2.44	6.11
30297	3/24/2017	Bestway	City Recycling	N/A	3.14	1.26	0.00	0.00	0.00	0.47	0.00	0.47	0.79	0.16	2.36	0.79	3.14
30248	3/28/2017	Bestway	City Recycling	N/A	9.73	1.95	0.00	0.00	0.00	0.00	0.00	7.78	0.00	0.00	9.73	0.00	9.73
	-			<u> </u>	52.04	15.04	0.90	0.00	0.00	4.58	0.00	18.32	8.18	5.01			52.04
												Total			43.86	8.18	52.04
												RECYCLI	NG % THIS	S PERIOD		84%	





CARTING Mini & Rolloff Containers 297 Norman Avenue

FAX: 718-281-9830

TEL: 718-423-6473

TEL: 718-423-6473	Brooklyn, New York 11	FAX: 718-281-9830
LEE	D RECYCLING	REPORT
Customer Name: E.W	Hower	Date: malozila
Job Location: 68-6	0 80 ST	
Ticket #: 30212	Yards: 20	Tons: 6119
Driver's Name: George	Dentro	Truck #: 22

thin the body of % of material to be true and correct. × Seven orm

% OF MA	TÈRI	AL BY VOLUME
PLASTIC 20	_%	CLEAN WOOD 40%
PAPER/CARDBOARD	_%	SCREEN FINES%
METAL	_%	WASTE%
6" MINUS	_%	
BRICK, CONCE	RETE,	MASONRY 40 %
INSTRUCTIONS: Estimate the amount or rec	yclables b	by volume. Give driver a copy and keep one for the office.
	21 10 B	
	DAWN	MANTZ

Office: 718-599-6573 . Fax: 718-388-6184

S01524-011-001	EV	HO		
	540	- SO1	524-011-	001

SCA School Construction Authority NYC Green Schools Rating System

Contractor: E.W. Howell Preparer: Molly Rooney Telephone:

Project: PS/IS 49Q Address: 63-60 80th Street, Middle Village, NY 11379 LLW: Date: End of April 2017

Construction Waste Mangement

Credit M1.5R, M1.6 and M1.7

Table 1: Construction Waste Management diversion Summary

Diverted / Recycled Materials Description	Diversion / Recycling Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
Concrete	Bestway	0.00	Tons
Wood	Bestway	113.07.	Tons
Gypsum Wallboard	Bestway	23.89	Tons
Crushed Asphalt	Bestway	0.00	Tons
Masonry	Bestway	153.80	Tons
Cardboard	Bestway	36.21	Tons
Other: Metal	Bestway	13.05	Tons
Other: Plastic	Bestway	32.12	Tons
Other:		1	particular and a second
Other			
Other			2
Other:		1	
Other:			
Other:			
Other			
Other		He	
Other	T.I.		
Other:		170.14	

Landfill materials Description	Landfill Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
General Mixed Waste	Bestway	69.63	Tons
Other:	1		
Other:			
TOTAL CONSTRUCTION W	ASTE SENT TO LANDFILL	69.63	

TOTAL OF ALL CONSTRUCTION WASTE	441.77	1
PERCENTAGE OF CONSTRUCTION WASTE DIVERTED FROM LANDFILL	84%	

05/01/09

Electronic copy of Form can be downloaded from SCA web site

Project Total as of end of April 2017.xls

Construction Waste Management Monthly Tracking Form

Project	realize.	F 0 43
Project	Location	Middle Village

Project No.

Ticket No

30305 30134 30321

30619

4/26/17

4/27/17

4/29/17

3062

3059

Name: Title: Date: Name: Title: Date: Dawn M. Mantz-Torres Administrator Molly Rooney 5/15/2017 Containe Total Materials Date Waste Handler Volume (Cu. Yds) Weight (Tons) **Recycled Material** Recipient Paper/ Fills/ Fines Metal Gypsum CMU Masonry Plastic Wood Rubbish Cardboard & Regrinds 0.64 0.00 2.55 2.91 0.00 6.38 6.46 3.13 1.60 0.00 0.00 0.00 0.96 0.64 N/A N/A 4/6/17 Bestway City Recycling 4/18/17 0.00 0.65 City Recycling 1.94 0.00 Bestway 0.32 City Recycl N/A Bestway ng 4/25/11 Bestway City Recycling N/A 7.01 2.10 1.05 0.00 0.00 0.70 0.00 1.05 1.40 0.70

0.51

0.00

Prepared I City Recycling Transfer Station

2.54 3.47

5.08

6.93

1.46 0.00 0.00 0.73 1.46 2.25 0.68 0.11 0.00 0.00 0.56 16.2 0.00

0.00

0.00

00	1.46	1.46	0.73	5.84	1.46
00	0.00	0.79	0.11	1.46	0.79
0.00	5.99	9.62	3.34		-
	Total			34.92	9.62
	RECYCLIN	NG % THIS	S PERIOD		78%

0.51

0.00

Weight of Recycled Material

3.83 3.55 3.13

5.61

4.57

6.93

Weight of Landfilled Materials

2.91

1.40

0.51

6.38

6.46

3.13

7.01

5.08

6.93

7.30

2.25

44.54

44.54

RECYCLING % THIS PERIOD

0.51

0.00



City Recycling

City Recycling

City Recycl

City Recycling



FAX: 718-281-9830

0.00

0.00

0.51

2.08

5.8

0.00

0.00

0

0.

0.51

1.39

Verified by E.W. Howell

Mini & Rolloff Containers 297 Norman Avenue TEL: 718-423-6473

Bestway

Bestway

Bestway

Bestway

Brooklyn, New York 11222 LEED RECYCLING REPORT

N/A

N/A

N/A

N/A

Customer Name: En Hould	Date: 4 -6 -1 /
Job Location: US 65 80 8	
Ticket #: -15181 Yards: 20	Tons: 6.38
Driver's Name: OAM	Truck #: 18

Name / Authorized Signature: By signing below, agree to the content described within the body of % of material to be true and correct. And x

	% OF MA	TERIA	L BY VOLUN	IE	
	PLASTIC_/D	%	CLEAN WOOD	25	_%
PAPER/CA	RDBOARD 10	_%		s_X	%
		_%	WASTE TO	_%	
	6" MINUS	_%			
	BRICK, CONCI	RETE, M	ASONRY 15	%	

DAWN MANTZ Coordinator Office: 718-599-6573 . Fax: 718-388-6184

Constru Credit M1 Project:	ction Waste Mangement 1.5R, M1.6 and M1.7 PS/IS 490	Babesber # S01524-012-001 6/12/17	SCA
Address:	63-60 80th Street, Middle Village.	NY 11379	Contract
Date:	End of May 2017		Telephor

School Construction Authority NYC Green Schools Rating System

tor: E.W. Howell er: Molly Rooney ne:

Table 1: Construction Waste Management diversion Summary

Diverted / Recycled Materials Description	Diversion / Recycling Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
Concrete	Bestway	0.00	Tons
Wood	Bestway	125.32	Tons
Gypsum Wallboard	Bestway	23.89	Tons
Crushed Asphalt	Bestway	0,00	Tons
Masonry	Bestway	155.72	Tons
Cardboard	Bestway	39.40	Tons
Other: Metal	Bestway	13.38	Tons
Other: Plastic	Bestway	33.49	Tons
Other:			And a second sec
Other		-	
Other			2
Other:			
Other:			
Other:			
Other			
Other		H	
Other:			
Other:		201.20	

Landfill materials Description	Landfill Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
General Mixed Waste	Bestway	72.91	Tons
Other:		· · · · · · · · · · · · · · · · · · ·	
Other:			
TOTAL CONSTRUCTION	VASTE SENT TO LANDFILL	72.91	
TOTAL OF AL	CONSTRUCTION WASTE	484.11	

	TOTAL OF ALL CONSTRUCTION WASTE	464.11	
1	PERCENTAGE OF CONSTRUCTION WASTE DIVERTED FROM LANDFILL	84%	

05/01/09

Electronic copy of Form can be downloaded from SCA web site

Project Total as of end of May 2017.xls

Construction Waste Management Monthly Tracking Form

Project Name: PS 49 Project Location Middle Village

Prepared I City Recycling Transfer Station Name: Dawn M. Mantz-Torres Title: Administrator Date: 6/6/2017

Verified by E.W. Howell Name: Molly Rooney Name: Title: Date:

Project No.					Date:	6/6/2017	tor			Date:							_
Ticket No.	Date	Waste Handler	Materials Recipient	Container Volume (Cu. Yds)	Total Weight (Tons)					Recycled Ma	tərlal				Weight of Recycled Material	Weight of Landfilled Materials	
						Wood	Metal	Gypsum	СМИ	Paper/ Cardboard	Filis/ Fines & Regrinds	Masonry	Rubbish	Plastic			
30597	5/2/17	Bestway	City Recycling	N/A	2.83	1.42	0.00	0.00	0.00	0.57	0.00	0.00	0.85	0.00	1.98	0.85	2.8
30164	5/4/17	Bestway	City Recycling	N/A	1.95	0.88	0.20	0.00	0.00	0.10	0.00	0.00	0.68	0.10	1.27	0.68	1.5
30396	5/10/17	Bestway	City Recycling	N/A	4.81	2.41	0.00	0.00	0.00	0.48	0.00	1.92	0.00	0.00	4.81	0.00	4.8
30691	5/15/17	Bestway	City Recycling	N/A	2.77	0.83	0.14	0.00	0.00	0.28	0.00	0.00	1.25	0.28	1.52	1.25	2.1
30782	5/25/17	Bestway	City Recycling	N/A	4.29	3.00	0.00	0.00	0.00	0.86	0.00	0.00	0.00	0.43	4.29	0.00	4.2
30335	5/27/17	Bestway	City Recycling	N/A	2.34	1.87	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.23	2.34	0.00	2.3
30452	5/31/17	Bestway	City Recycling	N/A	3.36	1.85	0.00	0.00	0.00	0.67	0.00	0.00	0.50	0.34	2.86	0.50	3.3
					22.35	12.25	0.33	0.00	0.00	3.19	0.00	1.92	3.28	1.37			22.3

 Total
 19.07
 3.28
 22.35

 RECYCLING % THIS PERIOD
 85%
 35%





Sample 30597

CARTING Mini & Rolloff Containers

TEL: 718-423-6473	297 Norman Avenue Brooklyn, New York 11222	FAX: 718-281-9830
LEE	D RECYCLING RE	PORT
Customer Name: E.W	Howall	Date: Talin
Job Location: 63-61	2 SEST	a contra
Ticket #:	Yards: 20	Tons: 2,00
Driver's Name: George	D-CALLER	Truck #: / Ø

Name / Authorized Signature: By signing below, I agree to the content described within the body of % of material to be true and correct xm a

% OF M	ATERIA	AL BY VOLUME
PLASTIC	%	CLEAN WOOD 56 %
PAPER/CARDBOARD	0 %	SCREEN FINES%
METAL	%	WASTE 30%
6" MINUS	_%	
BRICK, CON	CRETE, M	MASONRY%
INSTRUCTIONS; Estimate the amount or	ecyclables by	y volume. Give driver a copy and keep one for the office
	a the second	
	DAWN	MANTZ

Office: 718-599-6573 . Fax: 718-388-6184



SCA **School Construction Authority** NYC Green Schools Rating System

Project: PS/IS 49Q Address: 63-60 80th Street, Middle Village, NY 11379 LLW: End of June 2017 Date:

Contractor: E.W. Howell Preparer: Molly Rooney Telephone:

Table 1: Construction Waste Management diversion Summary

Construction Waste Mangement

Credit M1.5R, M1.6 and M1.7

Diverted / Recycled Materials Description	Diversion / Recycling Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
Concrete	Bestway	0.00	Tons
Wood	Bestway	132.26	Tons
Gypsum Wallboard	Bestway	23.89	Tons
Crushed Asphalt	Bestway	0.00	Tons
Masonry	Bestway	155.72	Tons
Cardboard	Bestway	40.78	Tons
Other: Metal	Bestway	14.20	Tons
Other: Plastic	Bestway	33.80	Tons
Other:			
Other:	NAME AND ADDRESS OF ADDRESS OF		
	TOTAL CONSTRUCTION WASTE DIVERTED	400.65	

Landfill materials Description	Landfill Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
General Mixed Waste	Bestway	76.79	Tons
Other:			
Other:			
TOTAL CONSTRUCTION W	ASTE SENT TO LANDFILL	76.79	
	CONSTRUCTION WASTE	(77.1)	

-	TOTAL OF ALL CONSTRUCTION WASTE	477.44	
	PERCENTAGE OF CONSTRUCTION WASTE DIVERTED FROM LANDFILL	84%	
			_

05/01/09

Electronic copy of Form can be downloaded from SCA web site

Project Total as of end of June 2017

Construction Was	ste Management Mo	onthly Tracking Form															
Project Name: Project Location Project No.	PS 49 Middle Village				Prepared Name: Title: Date:	City Recycl Dawn M. M Administral 6/6/2017	ling Transfe lantz-Torre: tor	er Station		Verified by Name: Title: Date:	E.W. Howell Molly Rooney						
	r	ī		O and allows	Tabat	1									Malabi et	Malabé at	n
Ticket No.	Date	Waste Handler	Materials Recipient	Volume	Weight					Recycled M	laterial				Recycled	Landfilled	
	1		-	(Cu. Yus)	(Tons)	Wood	Metal	Gypsum	СМИ	Paper/	FIIIs/ FInes &	Masonry	Rubbish	Plastic	Material	Materials	
30787	6/6/17	Bestway	City Recycling	N/A	2.50	0.88	0.13	0.00	0.00	Cardboard 0.38	Regrinds 0.00	0.00	1.13	0.00	1.38	1.13	2.50
30816	6/12/17	Bestway	City Recycling	N/A	3.85	3.27	0.00	0.00	0.00	0.19	0.00	0.00	0.19	0.19	3.66	0.19	3.85
30788	6/12/17 6/14/17	Bestway	City Recycling City Recycling	N/A N/A	2.34	0.94	0.47	0.00	0.00	0.47	0.00	0.00	0.70	0.00	2.79	0.70	4.65
	-				13.34	6.94	0.82	0.00	0.00	1.3	3 0.00	0.00	3.88	0.31			13.34
TEL: 71	Since BIC # 8-423-647	1983 280 B Min 3 Bro	ES ART ni & Rolloff 297 Normar poklyn, New	Contail Avenu York 11	G ners e 1222		FAX:	718-28	Sample 3 0.7 8 1-983	37 80							
Customo	Namo	EED R	ECYCL	ING	REP	Date:	cist	5/19	-	1							
Custome	r Name.	EALM	WELL		-		- All	PERV.		-							
Job Loca	tion: GS-	60 805	- GVERI	V31	- 11	Tons	-1	com		-							
Ticket #:	72757	Ya	rds: 20	_		True	A	20100		-							
Driver's I	Name:	ZENDEW	1.		±1.	Truck	#. 3										
Name / Authori	ized Signature: B	y signing below, I a	gree to the conten	t described	within the	body of 1	% of mate	rial to be tru	e and cor								
1		% OF M	ATERIA	LBY	VOL	UME				1							
		PLASTIC	%	CLE	AN WO		35	%									
PA	PER/CARE	BOARD	15 %	SCR	EEN F	INES	-	%									
		METAL	5_%	WAS	TE	45	%										
	6	" MINUS	%														
		BRICK, CC	NCRETE, N	ASON	RY_	~	%										
INSTRU	JCTIONS: Esti	mate the amount	or recyclables by	volume.	Give driv	ver a copy	y and kee	ep one for t	be office								

Coordinator Office: 718-599-6573 • Fax: 718-388-6184

Constru Credit M1	ction Waste Management 1.5R, M1.6 and M1.7	REAL AND ADDRESS REAL ADDRESS	SCA School Construction Authority
Project:	PS/IS 49Q		
Address:	63-60 80th Street, Middle Village, NY	11379	Contractor: E.W. Howell
LLW:	1000		Preparer: Molly Rooney
Date:	End of July 2017		Telephone:

Table 1: Construction Waste Management diversion Summary

Diverted / Recycled Materials Description	Diversion / Recycling Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
Concrete	Bestway	0.00	Tons
Wood	Bestway	157.76	Tons
Gypsum Wallboard	Bestway	23.89	Tons
Crushed Asphalt	Bestway	0.00	Tons
Masonry	Bestway	168.69	Tons
Cardboard	Bestway	56.22	Tons
Other: Metal	Bestway	31,84	Tons
Other: Plastic	Bestway	42.89	Tons
Other:		1	and the second
Other:			
Other:	1 Barris 1 B		
Other			
Other:			
Other:			-
Other:			
Other:			
Other:			
Other:		491.20	

ISTRUCTION WASTE DIVERTED

Landfill materials Description	Landfill Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)
General Mixed Waste	Bestway	102.44	Tons
Other:			
Other.	and the second		
TOTAL CONSTR	UCTION WASTE SENT TO LANDFILL	102.44	-
тот	AL OF ALL CONSTRUCTION WASTE	583,73	-
TOT	AL OF ALL CONSTRUCTION WASTE	583,73	

PERCENTAGE OF CONSTRUCTION WASTE DIVERTED FROM LANDFILL 82% 1

05/01/09

Electronic copy of Form can be downloaded from SCA web site

Project Total as of end of July 2017.xls

Construction Waste Management Monthly Tracking Form

Project No.

Project Name: PS 49 Project Location Middle Village

TEL: 718-423-6473

Prepared I City Recycling Transfer Station Name: Dawn M. Mantz-Torres Title: Administrator Date: 8/17/2017

tation Verified by E.W. Howel Name: Molly Rooney Title: Date:

				Container	Total										Weight of	Weight of	T.
Ticket No.	Date	Waste Handler	Materials	Volume	Weight					Recycled Mr	terial				Recycled	Landfilled	ı
The Not The.	Date	Waller Handler	Recipient	(Cu Vde)	(Tope)					neeyered in					Material	Motoriale	1
				(Cu. Tus)	(Tons)			1				1		1	Material	Materiale	╢
						Wood	Metal	Gypsum	CMU	Paper/	Fills/ Fines	Masonry	Rubbish	Plastic			
30795	7/1/17	Restway	City Recycling	NVA	0.94	0.25	0.00	0.00	0.00	0.50	0.00	0.00	0.08	0.00	0.78	0.08	╢
20058	7/2/17	Bostway	City Recycling	NIA	21.20	4.20	4.20	0.00	0.00	2.21	0.00	2.14	5.24	2.14	18.02	5.00	╢
30800	113/11	Destway	City Recycling	IN/A	21.30	4.20	4.20	0.00	0.00	3.21	0.00	2.14	0.34	2.14	10.03	0.04	-11-
30957	//5/17	Bestway	City Recycling	N/A	15.38	1.04	3.08	0.00	0.00	1.04	0.00	2.31	0.10	0.77	9.23	0.15	
30499	7/5/17	Bestway	City Recycling	N/A	3.93	1.97	0.39	0.00	0.00	0.79	0.00	0.00	0.00	0.79	3.93	0.00	
30960	7/8/17	Bestway	City Recycling	N/A	22.13	4.43	4.43	0.00	0.00	3.32	0.00	2.21	5.53	2.21	16.59	5.53	1
30895	7/6/17	Bestway	City Recycling	N/A	2.67	1.07	0.00	0.00	0.00	0.67	0.00	0.00	0.67	0.27	2.00	0.67	1
30802	7/10/17	Bestway	City Recycling	N/A	2.98	0.89	1.49	0.00	0.00	0.30	0.00	0.00	0.00	0.30	2.98	0.00	Ĩ
31516	7/15/17	Bestway	City Recycling	N/A	2.51	0.50	0.13	0.00	0.00	0.38	0.00	0.00	1.26	0.25	1.26	1.26	Ī
30968	7/17/17	Bestway	City Recycling	N/A	6.75	1.35	1.35	0.00	0.00	0.68	0.00	1.35	1.69	0.34	5.08	1.69	1
30972	7/21/17	Bestway	City Recycling	N/A	7.88	2.76	1.18	0.00	0.00	1.18	0.00	0.39	1.58	0.79	6.30	1.58	1
31504	7/22/17	Bestway	City Recycling	N/A	9.14	2.74	0.48	0.00	0.00	0.91	0.00	4.57	0.46	0.00	8.68	0.46	Ĩ
31529	7/24/17	Bestway	City Recycling	N/A	2.94	0.88	0.00	0.00	0.00	0.59	0.00	0.00	1.18	0.29	1.76	1.18	1
31533	7/26/17	Bestway	City Recycling	N/A	3.42	1.54	0.00	0.00	0.00	0.51	0.00	0.00	0.86	0.51	2.57	0.86	1
31508	7/31/17	Bestway	City Recycling	N/A	4.38	1.31	0.87	0.00	0.00	0.87	0.00	0.00	0.87	0.44	3.49	0.87	Ĩ
					106.29	25.50	17.64	0.00	0.00	15.44	0.00	12.97	25.65	9.09			-
												Total			80.64	25.85	Т

RECYCLING % THIS PERIOD 76%







CARTING Mini & Rolloff Containers 297 Norman Avenue

Brooklyn, New York 11222 FAX: 718-281-9830

LEED RECYCLING REPORT									
Customer Name: 2 W Howell	Date:								
Job Location: 63-60 80 ST									
Ticket #: 75 20% Yards: 10	Tons: 84								
Driver's Name:	Truck #:								

Name / Authorized Signature: By signing below, I agree to the content described within the body of % of material to be true and correct. X

% 0	F MATERIA	L BY VOLUME
PLASTIC	%	CLEAN WOOD 30%
PAPER/CARDBOARD	6 %	SCREEN FINES%
METAL	%	WASTE %
6" MINUS	%	
BRICK,	CONCRETE, N	MASONRY%
INSTRUCTIONS: Estimate the amo	ount or recyclables by	volume. Give driver a copy and keep one for the office.
Offic	DAWN I Coordi ce: 718-599-6573	MANTZ Instor • Fax: 718-388-6184





PS/IS 49Q Project: 63-60 80th Street, Middle Village, NY 11379 Address: LLW: Date: End of August 2017

Construction Waste Management

Credit M1.5R, M1.6 and M1.7

Contractor: E.W. Howell

Preparer: Molly Rooney Telephone:

Table 1: Construction Waste Management diversion Summary

Diverted / Recycled Materials Description	Diversion / Recycling Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)		
Concrete	Bestway	0.00	Tons		
Wood	Bestway	171.18	Tons		
Gypsum Wallboard	Bestway	23.89	Tons		
Crushed Asphalt	Bestway	0.00	Tons		
Masonry	Bestway	172.61	Tons		
Cardboard	Bestway	63.64	Tons		
Other: Metal	Bestway	41.68	Tons		
Other: Plastic	Bestway	47.29	Tons		
Other:		1	-		
Other:					
Other:	CONTRACTOR AND A PARTY				
	TOTAL CONSTRUCTION WASTE DIVERTED	520.29			

Landfill materials Description	Landfill Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)		
General Mixed Waste	Bestway	108.40	Tons		
Other:					
Other:					
TOTAL CONSTRUCTION V	WASTE SENT TO LANDFILL	108.40	-		
TOTAL OF N	L CONSTRUCTION WASTE	800.80			

	TOTAL OF ALL CONSTRUCTION WASTE	628.69	n here i
PERCE	NTAGE OF CONSTRUCTION WASTE DIVERTED FROM LANDFILL	83%	

05/01/09

Electronic copy of Form can be downloaded from SCA web site

Project Total as of end of August 2017

Construction Waste Management Monthly Tracking Form

Project Name: PS 49 Project Location Middle Village

Prepared City Recycling Transfer Station Name: Dawn M. Mantz-Torres Title: Administrator Date: 9/15/2017 Name: Title: Project No. Date: Weight of Recycled Material Weight of Landfilled Materials Containe Total Materials Ticket No Date Waste Handler Volume (Cu. Yds) Weight (Tons) **Recycled Material** Recipient Paper ills/ Fir Wood Metal Gypsum CMU Masonry Rubbisi Plastic Regri ardb 0.77 0.00 0.51 0.30 0.38 2.56 2.95 1.92 0.51 0.00 30436 8/1/17 City Recycling N/A 0.00 0.77 0.00 2.56 2.56 Bestway 8/2/1 8/3/1 City Recycling City Recycling N/A N/A 0.44 1.18 Bestway 2.95 0.00 1.34 0.58 0.48 0.00 0.00 0.00 1.92 Bestway Bestway 3.50 7.66 0.35 0.00 0.00 0.00 0.70 21933 8/4/17 City Recycling N/A 0.00 0.70 0.00 0.00 1.75 0.00 1.75 31512 N/A 8/8/17 2.30 0.00 0.38 Bestway City Recycling 1.15 7.28 0.3 7.66 31142 8/14/1 N/A 6.75 1.35 1.69 0.00 0.00 1.01 0.00 0.68 1.35 0.68 5.40 Bestway City Recycling 1.35 6.75 Bestway 0.00 31145 8/16/17 City Recycling N/A 14.63 5.12 3.66 0.00 0.00 2 19 1.46 1.46 0.73 13 16 1.46 14.63 6.75 0.34 31148 8/24/17 Bestway City Recycling N/A 2.03 1.69 0.00 0.00 0.68 0.00 1.01 1.01 5.74 1.01 6.75 13.40 3.9 5.9 4 4(44.97

FAX: 718-281-9830





Sample 30430

Verified by E.W. Howell Molly Rooney

Total RECYCLING % THIS PERIOD

39.00

5.96

87%

44.97

TEL: 718-423-6473

TEL: 718-423-6473	Brooklyn, New York 1	1222 FAX: 718-281-9830
LEE	D RECYCLING	REPORT
Customer Name:	EW Hourl	Date: 8/1/17
Job Location:	63-60-80	84
Ticket #: 738491	Yards: 3.0	Tons: 2,56
Driver's Name:	Chris	Truck #: j-j-j

Mini & Rolloff Containers 297 Norman Avenue

REST

Name / Authorized Signature. By signing below, I agree to the content described within the body of % of material to be true and correct. X

% OF MATERI	AL BY VOLUME
PLASTIC%	CLEAN WOOD 30 %
PAPER/CARDBOARD %	SCREEN FINES%
METAL%	WASTE%
6" MINUS%	
BRICK, CONCRETE,	MASONRY%
INSTRUCTIONS: Estimate the amount or recyclables	by volume. Give driver a copy and keep one for the office.
DAWN	MANTZ. rdinator

Office: 718-599-6573 . Fax: 718-388-6184





SCA School Construction Authority NYC Green Schools Rating System

Contractor: E.W. Howell Preparer: Molly Rooney Telephone:

Table 1: Construction Waste Management diversion Summary

Diverted / Recycled Materials Description	Diversion / Recycling Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)		
Concrete	Bestway	0.00	Tons		
Wood	Bestway	175.01	Tons		
Gypsum Wallboard	Bestway	23.89	Tons		
Crushed Asphalt	Bestway	0.00	Tons		
Masonry	Bestway	200.90	Tons		
Cardboard	Bestway	75.34	Tons		
Other: Metal	Bestway	46.18	Tons		
Other: Plastic	Bestway	.52.58	Tons		
Other:		· · · · · · · · · · · · · · · · · · ·			
Other:					
Other:		-			
Other:					
	TOTAL CONSTRUCTION WASTE DIVERTED	573.80			

Landfill materials Description	Landfill Hauler or Location	Quantity of Diverted / Recycled Waste	Units (tons or cubic yards)		
General Mixed Waste	Bestway	111.33	Tons		
Other:					
Other:					
TOTAL CONSTRUCTION W	ASTE SENT TO LANDFILL	111.33			
	Contraction and a strategy and				

TOTAL OF ALL CONSTRUCTION WASTE	685,23	
PERCENTAGE OF CONSTRUCTION WASTE DIVERTED FROM LANDFILL	B4%	

05/01/09

Electronic copy of Form can be downloaded from SCA web site

Project Total as of end of September 2017

Construction Was	te Management Monthly Tracking Form
Project Name:	PS 49
Project Location	Middle Vllage

Prepared City Recycling Transfer Station Name: Dawn M. Mantz-Torres Title: Administrator

Verified by E.W. Howell Name: Molly Rooney Title:

Project No.					Date:	10/15/2017	, ,			Date:							
Ticket No.	Date	Waste Handler	Materiais Recipient	Container Volume (Cu. Yds)	Total Weight (Tons)		Weight of Recycled Material Recycled Landfilled Material Material										
						Wood	Metal	Gypsum	CMU	Paper/ Cardboard	Fills/ Fines & Regrinds	Masonry	Rubbish	Plastic			
0901107	9/1/17	Bestway	City Recycling	N/A	11.25	1.13	1.13	0.00	0.00	5.63	0.00	0.00	1.13	2.25	10.13	1.13	11.25
090217	9/2/17	Bestway	City Recycling	N/A	27.28	0.00	0.00	0.00	0.00	0.00	0.00	27.28	0.00	0.00	27.28	0.00	27.28
090817	9/8/17	Bestway	City Recycling	N/A	11.25	1.69	1.69	0.00	0.00	5.06	0.00	0.00	1.13	1.69	10.13	1.13	11.25
092317	9/23/17	Bestway	City Recycling	N/A	6.75	1.01	1.69	0.00	0.00	1.01	0.00	1.01	0.68	1.35	6.08	0.68	6.75
					56.53	3.83	4.50	0.00	0.00	11.70	0.00	28.29	2.93	5.29			56.53

Sample

090117

 Total
 53.61
 2.93
 56.53

 RECYCLING % THIS PERIOD
 95%
 95%
 95%



Date Customer Name: G 117 LEADS Job Location: ROTIST 60 Ticket #: Tons: Yards: Driver's Name: Truck #:

Name / Authorized Signature: By signing below, I agroe to the content described within the body of % of maturial to be true and correct. X

% OF MA	TERI	AL BY VOLUME
PLASTIC 20	_%	CLEAN WOOD%
PAPER/CARDBOARD	%	SCREEN FINES%
METAL 10	%	WASTE_/0_%
6" MINUS	%	
BRICK, CONC	RETE,	MASONRY%
INSTRUCTIONS: Estimate the amount or re	cyclables t	by volume. Give driver a copy and keep one for the office.
Office: 718-	DAWN Goor	MANTZ dinator • Fax: 718-388-6184



New York City School Construction Authority 30-30 Thomson Ave, Long Island City, NY 11101

RE: Construction Waste Management, Material Credits M1.5R, M1.6, M1.7

To whom it may concern,

As per the supplemental Construction Waste Management forms, the total amount of waste material diverted from PS 49Q is 573.90 tons. This waste was diverted by means of a third-party carting company, Bestway Carting Company. Please see form dated, End of September 2017, for calculations regarding the final project total.

Regards,

Melly Reeney

Molly Rooney, LEED AP BD+C Assistant Project Manager E.W. Howell Construction Group

LONG ISLAND: VAPOlewinkowskend Solution COL Parevers, NY 11803.
NEW YORK CITY: 37 West: 37** Stead, 7** Precidence Vers, NY 10013
EWHOWELL COM

M2.1R & M2.2, M2.3, M2.4: Comprehensive Contractor Sustainable Materials Form. Contractor

ainable Materials Tracking Form c

	acking Form.						
CONTRACTOR'S SUSTAINABLE Credit M 2.1R, M 2.2, M2.3R and M2.4 Project: P.S. 49 Queens	MATERIALS FORM		Contractor:	Isin	SCA SCH	col Construct C Green Schools	ion Authority Rating System
Address: 6360 80the Street, Middl	e Village	C	ontractor Contact:	John).		
LLW: 89232 Date: A	20031512017		Spec Section:		Telephone	516-366	-2972
1		1	Recycled Content		Regional*** Materials		
Product Name	Manufacturer	Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
~	\sim		16	1	10	20 10 miles	30 KO miles
· · · · · · · · · · · · · · · · · · ·	-		MA	NA	NIN	ZT miles	Z7+ > miles
		_				miles	miles
			+			miles	miles
		-				miles	miles
						in the second seco	A second s

Definitions:

- * Post-Consumer Recycled Content: Material or finshed product that has served its intended consumer use and has been discarded by consumer.
- ** Pre-Consumer Recycled Content: Recovered industrial and manufacturing materials diverted from municipal solid waste for the purpose of collection, recycling and disposition. Examples include fly-ash and synthetic gypsum, because they are waste products from coal burning electricity plants. (Scrap raw materials that can be reused in the same manufacturing process from which they are recovered are not considered Pre-Consumer Recycled Content.)
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Notes:

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- 2 Recycled content for steel products where it is not possible to determine recycled content use default assumption of 25% post-consumer recycled content
- 3 Regional content for concrete provide combined cost for all concrete materials and distance information requested.
- 4 Regional content for materials with varyone point of extraction all within the 500-mile radius list a single item with the greatest distance.
- 5 Provide back-up documentation for information on form above such as product data or manufacturer's statements.

Contractor Certification:

rein is an accurate representation of	the material qualification	ons provided, as	components of the final bu	ilding construction. Furthermore,	
inderstand that any change in such c	qualifications during the	purchasing pen	nog will require prior written	approval from the Construction Manager and O	wner
Ciapatura of Au	thorized Representative	: Tor	(sumar	Date: MAY 12 2018	EME revised on

io miles milés miles miles miles miles

CONTRACTOR'S SUSTAINABLE MATERIALS FORM Credit M 2.1R, M 2.2, M2.3R and M2.4



SCA School Construction Authority NYC Green Schools Rating System

Contractor Pioneer Landscaping & Asphalt Paving, Inc.

Project: PS49Q - Queens Address: 63-60 80th Street, Middle Village

02511-005-002 Submittal# ontractor Contact: Michael Cox 10/24/17

LLW. Date: 7/26/2017

02511 Telephone: 631-269-400 Spec Section:

Date 10/24/17

	Manufacturer	Material Cost (no Labor & Equip)	Recycled Content		Regional*** Materials		
Product Name			Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
Type 3 Binder & Type 7 Top	Rason Materials - Cedarhurst		15%	0%	1.5%)	16 miles	16 miles
						miles	miles
			1			miles	miles
						miles	miles
						miles	ាហើមទ
			1			miles	miles

Definitions:

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- 5 Provide back-up documentation for information on form above such as product data or manufacturer's statements.

Contractor Certification:

I. MICHAEL COX a duly authorized representative of Proceedians capings Caping Cophat Paymeneraby certify that the material information harein is an accurate representation of the material qualifications privided, at components of the final building construction. Furthermore, of the final building construction. Furthermore, I understand that any change in such qualifications during the pu Ill require prior written approval from the Construction Manager and Owner.

Signature of Authorized Representative

05/01/09

michael Cox, president

This form may be downloaded from SCA web site.

CONTRACTOR'S SUSTAINABLE MATERIALS FORM Credit M 2.1R, M 2.2, M2.3R and M2.4



Project: PS 49 MIDDLE VILLAGE

Address: 63-60 80th St., Middle Village, NY 11379

LLW: 089232 Date: Feb. 7, 2018

Sub - Contractor: Darcon Construction, Inc.

Spec Section: 03300

Contractor Contact April Manalo

Telephone: 516-358-2533

			Recycled	Content	1	Regional*** Material	5
Product Name	Manufacturer	Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
NYCDDC 4000 psi AE	Best Concrete	S		· · · · · · · · · · · · · · · · · · ·			
> Holcim Portland Cement	Holcim	S		%			8
	1		-	100%	10	<500 miles	<500 miles
> Fine Aggregate	LI Natural/Coram	S		0%	100%	<500 miles	<500 miles
> Tilcon Stone	Tilcon	s	09	0%	100%	<500 miles	<500 miles
> MBVR	BASE	S	<5	%	87%	<500 miles	<500 miles
> Pozzolith 200N	BASF	Ş	09	25%	68%	<500 miles	<500 miles
	V// 57.00						

Definitions:

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Contractor Certification:

I, Shiela Zalameda a duly authorized representative of Darcon Construction, Inc. hereby certify that the material information herein is an accurate representation of the material qualifications provided, as components of the final building construction. Furthermore,

I understand that any change in such qualifications during the purchasing period will require prior written approval from the Construction Manager and Owner.

mpalu

Signature of Authorized Representative:

Date:

2/7/2018

This form may be downloaded from SCA web site

05/01/09

CONTRACTOR'S SUSTAINABLE MATERIALS FORM Credit M 2.1R, M 2.2, M2.3R and M2.4

SCA School Construction Authority NYC Green Schools Rating System

Project PS 49 MIDDLE VILLAGE

Address 63-60 80th St., Middle Village, NY 11379

LLW 089232 Date 14-May-18

Sub - Contractor Darcon Construction, Inc.

Contractor Contact April Manalo Spec Section: 03300

Telephone. 516-358-2533

Manufactures	Material Cost (no Labor & Equip.)	Recycled Content		Regional*** Materials		
		Percentage Post-Consumer* by weight	Percentage Pre-Consumer* by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance belween project site and manufacture site
W.R. Meadows	5	0%	36%	100%	i 161 miles	151 mile
	Manufactures W.R. Meadows	Manufactures Material Cost (no Labor & Equip.) W.R. Meadows 5	Manufacture: Material Cost (no Labor & Equip.) Percentage Post-Consumer* by weight W.R. Meadows 5. 0%	Manufacture: Material Cost (no Labor & Equip.) Recycled. Content. W.R. Meadows % % W.R. Meadows % 0% 0 0% 36%	Manufacture: Material Cost (no Labor & Equip.) Recycled Content Percentage Percentage Post-Consumer by weight Percentage Regionally Extracted*** by weight W.R. Meadows 5 0% 36% 10% Image: State S	Manufacture: Material Cost (no Labor & Equip.) Recycled Content. Regional*** Material Percentage Pre-Consumer* by weight Percentage Regionally by weight Distance between project site and extraction site W.R. Meadows 5 0% 30% 10% 10% 10% 10%

Definitions:

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Contractor Certification:

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 a duly authorized representative of herein is an accurate representation of the material qualifications provided, as components of the final building construction. Furthermore, I understand that any change in such qualifications during the purchasing period will require prior written approval from the Construction Manager and Owner.

ma

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Signature of Authorized Representative

Date 5/14/2018
SCA School Construction Authority NYC Green Schools Rating System

Project: PS 49 MIDDLE VILLAGE

Sub - Contractor: Darcon Construction, Inc.

Address: 63-60 80th St., Middle Village, NY 11379

Contractor Contact: April Manalo

LLW: 089232 Date:

Spec Section: 2723 Telephone:

Telephone: 516-358-2533

		Material Cost (no Labor & Equip.)	Recycled Content		Regional*** Materials		
Product Name	Manufacturer		Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
HDPE Pipe	Lane	\$	40%	6 0% 1	not disclosed	not disclosed	not disclosed
				·			
						-	

Definitions:

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Contractor Certification:

05/01/09

I. April Manalo	a duly authorized representative of	Darcon Construction, Inc.	hereby certify that the material information
herein is an accurate r	epresentation of the material qualification	s provided, as components of the final be	uilding construction. Furthermore,
I understand that any	change in such qualifications during the p	urchasing period will require prior writter	n approval from the Construction Manager and Owner.

Signature of Authorized Representative:	Alexander	Date: 3.16.16
	JY	This

This form may be downloaded from SCA web site



Project: PS 49 MIDDLE VILLAGE

LLW: 089232 Date:

Address: 63-60 80th St., Middle Village, NY 11379

Sub - Contractor: Darcon Construction, Inc.

Contractor Contact: April Manalo Spec Section: 2723

Telephone: 516-358-2533

	100 C	Material Cost (no Labor & Equip.)	Recycled Content		Regional*** Materials			
	Manutacturer		Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site	
Reinforcing Bars	Gerdau	S	74%	6 21%	100%	<500 miles	<500 miles	
					_			

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	Signature of Authorized Representative:	Alennal	Date: 4.12.2016
05/01/09		\smile '	This form may be downloaded from SCA web site

SCA **School Construction Authority**

NYC Green Schools Rating System

Project: PS 49 MIDDLE VILLAGE

Address: 63-60 80th St., Middle Village, NY 11379

LLW: 089232 Date:

Contractor Contact: April Manalo Spec Section: 03300

Sub - Contractor: Darcon Construction.

Telephone: 516-358-2533

Inc

Deadured Manager	in the		Recycled Content		Regional*** Materials			
Trouved home	Manuscarer	Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentag Regional Extracted*	ge ly tt	Distance between project site and extraction site	Distance between project site and
4000 psi NW - Conventional	Best Concrete	5				-		
> Holcim Portland Cement	Holcim	5	0%	19%		0%	>500 miles	>500 million
> Essroc Slag	Essroc Italcementi Group	5	0%	100%	100%	50%	<500 miles	<500 miles
> Coram Sand	Coram	\$	0%	0%		100%	<500 miles	<500 miles
> Tilcon Stone	Tilcon	S	0%	0%		100%	<500 miles	<500 miles
> MBVR	BASF	5	<59	X.	-	87%	<500 miles	<500 miles
> Pozzolith 200N	BASF	S.	0%	2.5%		68%	<500 miles	<500 miles
	+							

Definitions:

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Signature of Authorized Representative:
Date: 3.9.2016
Date: 3.9.2016

05/01/09

This form may be downloaded from SCA web site

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03300-026-001

3/21/16

Submittal a

SCA School Construction Authority NYC Green Schools Rating System

Project: PS 49 MIDDLE VILLAGE

Address: 63-60 80th St., Middle Village, NY 11379

LLW: 089232 Date:

Contractor Contact: April Manalo

Sub - Contractor: Darcon Construction, Inc.

Spec Section: 03300

Telephone: 516-358-2533

			Recycled	Content	Regional*** Materials			
- roodu Nanie	manufacturer	Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentag Regional Extracted by weigh	ge ly it	Distance between project site and extraction site	Distance between project site and manufacture site
4000 psi NW - Pump	Best Concrete	S						
> Holcim Portland Cement	Holcim	5	0%	19%	-	0%	>500 miles	>500 miles
> Essroc Slag	Essroc Italcementi Group	5	0%	100%	100%	50%	<500 miles	<500 miles
> Coram Sand	Coram	5	0%	0%		100%	<500 miles	<500 miles
> Tilcon Stone	Tilcon	5	0%	0%		100%	<500 miles	<500 miles
> MBVR	BASF	5	<5	Ye		87%	<500 miles	<500 miles
> Plastol 5000	Euclid	\$	0%	6%		68%	not disclosed	<500 miles

Definitions:

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almanal Signature of Authorized Representative:

05/01/09

REVIEWED FOR SUBMISSION PS /IS 49 Queen SCA Contract #: C000014133 LLW#089132 IOMEL 03300-027-001 3/21/16

Date: 3.9.2016

This form may be downloaded from PCA such site

SCA School Construction Authority

NYC Green Schools Rating System

Project: PS 49 MIDDLE VILLAGE

Address: 63-60 80th St., Middle Village, NY 11379 LLW: 089232 Date:

Contractor Contact: April Manalo

Spec Section: 03300

Sub - Contractor: Darcon Construction, Inc.

Telephone: 516-358-2533

Charles Married	Manufacturer	Material Cost (no Labor & Equip.)	Recycled Content		Regional*** Materials			
			Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site	
4000 psi NW - Pump, No Air	Best Concrete	S					a concentration and	
> Holcim Portland Cement	Holcim	\$	0%	19%	0	>500 miles	>500 miles	
> Essroc Slag	Essroc Italcementi Group	5	0%	100%	100% 50	<500 miles	<500 miles	
> Coram Sand	Coram	5	0%	0%	009	<500 miles	<500 miles	
> Tilcon Stone	Tilcon	5	0%	0%	1009	<500 miles	<500 miles	
> Plastol 5000	Euclid	\$	0%	0%	68	not disclosed	<500 miles	
				1				

Definitions:

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Contractor Certification:

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Signature of Authorized Representative:

05/01/09

Submittal # 03300-028-001 3/21/16

This form may be downloaded from SCA web site

Date: 3.9.2016

SCA School Construction Authority NYC Green Schools Rating System

Project: PS 49 MIDDLE VILLAGE

Address: 63-60 Both St., Middle Village, NY 11379

LLW: 089232 Date:

Sub - Contractor: Darcon Construction, Inc.

Centractor Contact: April Manalo Spec Section: 03300

Telephone: 516-358-2533

Product Name	the second second	Material Cost (no. Labor & Equip.)	Recycled	Content	Regional*** Materials			
Product Name	wanuladmar		Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and	
4000 psi LW	Best Concrete	5			al trangite	Proto a country and	internet better bille	
> Holcim Portland Cement	Holcim	S	0%	19%	0%	>500 miles	>500 mile	
> Essroc Slag	Essroc Italcementi Group	S.	0%	100%	100%	<500 miles	<500 miles	
> Coram Sand	Coram	5	0%	0%	100%	c500 miles	<500 mile	
> Norlite Stone	Norlite Corporation	\$	33%	33%	100%	<500 miles	<500 miles	
> MBVR	BASE	5	<5	Va I	87%	<500 miles	<500 miles	
> Plastol 5000	Euclid	5	0%	0%	0 8%	not disclosed	<500 miles	
the set of				1 · · · · · · · · · · · · · · · · · · ·				

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Contractor Certification:

ns/n1/no

 I. April Manalo
 a duly authorized representative of
 Darcon Construction, Inc.
 hereby certify that the material information

 herein is an accurate representation of the material qualifications provided, as components of the final building construction. Furthermore,
 1 understand that any change in such qualifications during the purchasing geriod will require prior written approval from the Construction Manager and Owner.

Signature of Authorized Representative: ______________________________Date: 4.11.2016





Project: PS 49 MIDDLE VILLAGE

Address: 63-60 80th St., Middle Village, NY 11379

LLW: 089232 Date:

Sub - Contractor: Darcon Construction, Inc.

Contractor Contact: April Manalo Spec Section: 03300

Telephone: 516-358-2533

				Recycled (Content		Regional*** Material	s
Product Name 1000 psi NW - Conv. 0.40 w/c atio > Holcim Portland Cement > Essroc Slag > Coram Sand > Tilcon Stone > MBVR Bare-With 2001	Manufacturer	Material Cost (no Labor & Equip.)		Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
4000 psi NW - Conv. 0.40 w/c		S						
ratio	Best Concrete		~~~~~					
> Holcim Portland Cement	Holcim	S	1	0%	19%	0%	>500 miles	>500 miles
> Essroc Slag	Essroc Italcementi Group	S	4 !	0%	100%	100%	<500 miles	<500 miles
> Coram Sand	Coram	\$		0%	0%	100%	<500 miles	<500 miles
> Tilcon Stone	Tilcon	S		0%	0%	100%	<500 miles	<500 miles
> MBVR	BASF	S		<5%		87%	<500 miles	<500 miles
> Pozzolith 200N	BASF	5		0%	25%	68%	i <500 miles	<500 miles
							1	

Definitions:

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- 4 Regional content for materials with varyone point of extraction all within the 500-mile radius list a single item with the greatest distance.
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Aleman Date: 6.30.2016 Signature of Authorized Representative: This form more he downloaded from CCA woh eite



SCA School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

Contractor: Giaquinto Masonry

Address: 6360 80th Street, Middle Village

Contractor Contact: Tammy Mojica

LLW: 89232 Date: 9/27/2016 Telephone: (631) 242-2760 Spec Section: 4200

	The State of a		Recycled C	Content	Regional*** Materials			
Product Name	Manufacturer	Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre- Consumer" by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site	
CMU	Barrasso & Sons		0%	23%	100%	70/ 112/ 160/ 94 miles	45 mile	
		-						

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Jammy Mojica

Signature of Authorized Representative:

9/27/2016



1

Project: P.S. 49 Queens

Contractor: Giaquinto Masonry

Address: 6360 80th Street, Middle Village
LLW: 89232 Date: 9/27/2016

Contractor Contact: Tammy Mojica

Spec Section: 4200 Telephone: (631) 242-2760

	Product Name Manufacturer Materia Labori state Arctic White Brick Belden		Recycled C	Content	Regional*** Materials				
Product Name		Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site		
Interstate Arctic White Brick			26%	3.60%	0	% 1981mile	s 1981 miles		
							6		

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Signature of Authorized Representative:

Tammy Mojica

9/27/2016



9/27/2016

SCA School Construction Authority NYC Green Schools Rating System

Project P.S. 49 Queens

Contractor: Giaquinto Masonry

Address: 6360 80th Street, Middle Village LLW: 89232 Date: 9/27/2016

Contractor Contact: Tammy Mojica

Spec Section: 4200 Telephone: (631) 242-2760

	Sector Sector		Recycled Content		Regional*** Materials			
Product Name	Manufacturer	Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site	
Interstate Mountain Red Brick	Belden		8.80%	1.20%	0 9	i 1981 miles	s 1981 mile:	

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> Jammy Mejica Signature of Authorized Representative: Date:

> > Page 121 of 272



SCA School Construction Authority NYC Green Schools Rating System

Project: P	.S. 49 Queens		Contractor:	Giaquinto Masonry	
Address:	636	0 80th Street, Middle Village	Contractor Contact:	Tammy Moji	ica
LLW:	89232	Date: 9/27/2016	Spec Section:	4200	Telephone: (

ranning work	a		
4200	Telephone:	(631	242-2760

	100000	Material Cost (no Labor & Equip.)	Recycled Content		Regional*** Materials		
Product Name	Manufacturer		Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
120 Truss Mesh Wire	Hohmann & Barnard		25%	75%	100%	36 miles	25 miles
					1		

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Signature of Authorized Representative:

Tammy Mojica

9/27/2016



School Construction Authority NYC Green Schools Rating System

Project: P	S. 49 Queen	S	
Address:	636	0 80th Street, Middle Village	
LLW:	89232	Date: 9/27/2016	

Contractor: Giaquinto Masonry Contractor Contact: Tammy Mojica

Spec Section: 4200 Telephone: (631) 242-2760

Regional*** Materials Recycled Content Product Name Manufacturer Percentage Percentage Material Cost (no Percentage Distance between Pre-Regionally Distance between Labor & Equip.) Post-Consumer Consumer* Extracted*** project site and project site and by weight by weight by weight extraction site manufacture site 180 Dub'l Loop Lok SS Hohmann & Barnard 0% 97% 100% 12 miles 25 miles

Definitions:

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Signature of Authorized Representative:

Jammy Mojica

Date: 9/27/2016

SCA School Construction Authority

NYC Green Schools Rating System

Project: P	Project: P.S. 49 Queens		Contractor:	Giaquinto Masonry		
Address:	636	0 80th Street, Middle Village	Contractor Contact:	Tammy Moji	ica	
LLW:	89232	Date: 9/27/2016	Spec Section:	4200	Telephone: (631) 242-2760	

- The company of the	Table Shares in the	Material Cost (no Labor & Equip.)	Recycled Content		Regional*** Materials		
Product Name	Manufacturer		Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
315 FlexibleDovetail Anchor SS	Hohmann & Barnard		0%	97%	100%	19 miles	25 miles
1							

Definitions:

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Signature of Authorized Representative:

Jammy Mejica

Date: 9/27/2016



NYC Green Schools Rating System

Project: P.S. 49 Queens Address: 6360 80th Street, Middle Village LLW: 89232 Date: 9/27/2016

Contractor: Giaquinto Masonry Contractor Contact: Tammy Mojica

Spec Section: 4200

Telephone: (631) 242-2760

Product Name	Manufacturer	Material Cost (no Labor & Equip.)	Recycled Content		Regional*** Materials		
			Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
344 Rigid Partition Anchor	Hohmann & Barnard		0%	99%	100%	4 miles	25 miles

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Signature of Authorized Representative:

Jammy Mojica

Date: 9/27/2016



SCA School Construction Authority NYC Green Schools Rating System

Project: P	bject: P.S. 49 Queens Contractor		Giaquinto Masonry		
Address:	636	0 80th Street, Middle Village	Contractor Contact:	Tammy Moji	ca
LLW:	89232	Date: 9/27/2016	Spec Section:	4200	Telephone: (631) 242-2760

Recycled Content Regional*** Materials Product Name Manufacturer Percentage Percentage Material Cost (no Percentage Pre-Regionally Distance between Distance between Labor & Equip.) Post-Consumer Consumer** Extracted** project site and project site and by weight by weight by weight extraction site manufacture site 60% 353L Column Anchor Hohmann & Barnard 0% 4 mile 25 miles 99 % 3

Definitions:

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Signature of Authorized Representative:

Jammy Mojica

Date: 9/27/2016

Page 126 of 272



Address: 6260 00th Street Middle Village		Contractor.	Contractor. Graquinto Masoni y						
LLW:	Address: 6360 80th Street, Middle Village LLW: 89232 Date: 9/27/2016		Spec Section:	Spec Section: 4200 Telephone:			one: (631) 242-2760		
		The last	1	Recycled (Content	State State	Regional*** Materia	IS	
Produ	ct Name	Manufacturer	Material Cost (no.	Dercentage	Percentage	Percentage			

		Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Pre- Consumer** by weight	Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
355L Column Anchor	Hohmann & Barnard	1	0%	99 %	100%	4 miles	25 miles
						-	

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	or =17°	1000	200000
Signature of Authorized Representative:	Jammy Mojica	Date:	9/27/2016



School Construction Authority NYC Green Schools Rating System

dress:	636	0 80th Street, Middle Village	Contractor Contact: Ta	ammy Mojica	a
LLW:	89232	Date: 9/27/2016	Spec Section: 42	200	Telephone: (631) 242-2760

Product Name	Manufacturer	Material Cost (no Labor & Equip.)	Recycled (Content	Regional*** Materials			
			Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project sile and extraction site	Distance between project site and manufacture site	
Continuous Wire	Hohmann & Barnard	4	0%	97%	100%	12 miles	25 miles	

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Date: 9/27/2016

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SCA School Construction Authority NYC Green Schools Rating System

Project: P	.S. 49 Queens	Contractor: Giaquinto Masonry
Address:	6360 80th Street, Middle Village	Contractor Contact: Tammy Mojica
1114/-	00222 Data: 0/27/2016	Spor Section: 1200 Tolo

lephone: (631) 242-2760

and a start of the	and a second second	Material Cost (no Labor & Equip.)	Recycled C	Content	Regional*** Materials			
Product Name	Manufacturer		Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site	
Mesh Wall Tie	Hohmann & Barnard		0%	0%	100%	39 miles	38 mil	
		-	-					

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> Jammy Mojica Signature of Authorized Representative:

Date: 9/27/2016



SCA School Construction Authority NYC Green Schools Rating System

Project: P.	S. 49 Que	ens	Contractor:	Giaquinto Masor	iry					
Address:	636	0 80th Street, Middle Village	Contractor Contact:	Tammy Mojica						
LLW:	LLW: <u>89232</u> Date: <u>9/27/2016</u> Spec		Spec Section:	4200	Telephone: (631) 242-2760					
1000	Product Name	and the second		Recycled (Content	Regional*** Materials				
Produc	st Name	Manufacturer	Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project sile and extraction site	Distance between project site and manufacture site		
Rubber Contro	ol Joint	Hohmann & Barnard	1	0%	50%	100%	411 miles	400 miles		

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- *** Regional Materials: Regionally manufactured materials that have their origin within 500 miles of the project site. These would included products that are regionally mined, harvested, salvaged or re-used (including those salvaged from the site.)

Notes:

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- 3 Regional content for concrete provide combined cost for all concrete materials and distance information requested.
- 4 Regional content for materials with varyone point of extraction all within the 500-mile radius list a single item with the greatest distance.
- 5 Provide back-up documentation for information on form above such as product data or manufacturer's statements.

Contractor Certification:

I, Tammy mojica a duly authorized representative of Giaquinto Masonry, Inc. hereby certify that the material information herein is an accurate representation of the material qualifications provided, as components of the final building construction. Furthermore, I understand that any change in such qualifications during the purchasing period will require prior written approval from the Construction Manager and Owner.

Signature of Authorized Representative:

Jammy Mejica

Date: 9/27/2016



Project: P.S. 49 Queens Contractor: Giaquinto Masonry Address: 6360 80th Street, Middle Village Contractor Contact: Tammy Mojica LLW: 89232 Date: 9/27/2016 Spec Section: 4200

Telephone: (631) 242-2760

an in many and	The second se		Recycled	Content	Regional*** Materials			
Product Name	Manufacturer	Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site	
Rebar	NUCOR	1	82.9 %	17%	100%	207 miles	207 mile	

Definitions:

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Signature of Authorized Representative:

Jammy Mojica

9/27/2016 Date:



School Construction Authority NYC Green Schools Rating System

 Project: P.S. 49 Queens
 Contractor: Giaquinto Masonry

 Address: 6360 80th Street, Middle Village
 Contractor Contact: Tammy Mojica

LLW: 89232 Date: 9/27/2016 Spec Section: 4200 Telephone: (631) 242-2760

	Manufacturer	Material Cost (no Labor & Equip.)	Recycled Content		Regional*** Materials				
Product Name			Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site		
3000psi Fine Grout	Spec Mix	4	0%	2%	100%	121/75/88 miles	68 mile		
and the second second									
-							-		
						-	1		

Definitions:

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Signature of Authorized Representative:

Tammy Mejica

Date: 9/27/2016

Project: P.S. 49 Queens



SCA School Construction Authority NYC Green Schools Rating System

Address: 6360 80th Street, Middle	Village	Contractor Contact:	Tammy Mojica				
LLW: 89232 Date	9/27/2016	Spec Section:	4200	Telephone:	631) 242-2760	1	
	111-0				Sector N		
Product Name	Manufacturer	- I have been his	Recycled (Content	Descriptions	Regional*** Materials	Ť.
		Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre- Consumer**	Regionally Extracted***	Distance between project site	Distance between project site and manufacture site
Type N (Colored) (for Brick)	Spec Mix	- 4	0%	1%	93.5 %	121/247/497/164/58/59 mile:	68 mi
		(* (*					
	4		2			-	
	-		<u> </u>			-	
efinitions: Post-Consumer Recycled Content:	Material or finshed product that has	served its intended consu	umer use and has I	been discarded b	y consumer.		
and disposition. Examples include fly reused in the same manufacturing pro-	Recovered industrial and manufacture -ash and synthetic gypsum, because pocess from which they are recovered	they are waste products f are not considered Pre-C	from coal burning e onsumer Recycled	electricity plants. Content.)	(Scrap raw mat	, recycling erials that can be	
Regional Materials: Regionally man are regionally mined, harvested, salva	ufactured materials that have their or aged or re-used (including those salv	rigin within 500 miles of the aged from the site.)	e project site. The	se would include	d products that		
-							
otes: Recycled content for concrete - provi	de cost for cementitious materials an	d percentage of cementitic	ous materials that a	are recycled-cont	ent		
Recycled content for steel products -	where it is not possible to determine	recycled content use defa	ult assumption of 2	25% post-consum	er recycled cont	ent	
Regional content for concrete - provid	le combined cost for all concrete mat	terials and distance inform	ation requested.				
Regional content - for materials with	raryone point of extraction all within the	he 500-mile radius list a si	ngle item with the g	greatest distance	8		
Provide back-up documentation for in	formation on form above - such as p	roduct data or manufactur	er's statements.				
ontractor Certification:							
Tammu mailag	and representative of Cierc	unto Macanay Inc.		haraby actify th	at the material in	formation	
, I ammy mojica a duly authon erein is an accurate representation of t	be material qualifications provided a	s components of the final l	building construction	nereby certity the	at the material in	tormation	
understand that any change in such qu	ualifications during the purchasing pe	riod will require prior writte	approval from th	e Construction N	anager and Owr	ner.	
	I A P C A P						
Signature	of Authorized Representative:	Jamony Me	fica	Date:	9/27/2016		
ONTRACTOR'S SUSTAINABLE	MATERIAL S FORM				1th		
Credit M 2.1R, M 2.2, M2.3R and M2.4	MATERIALS FORM				SCA Sch	ool Construction Aut	nority
					NYC	Green Schools Rating Sys	stem
Desiret D.C. 40 Outstand		Contractor	Ciaminta Masar			Sector Constraints and and	
Project. P.S. 49 Queens		Contractor.	Giaquinto Masor	uy			-
Address: 6360 80th Street, Middle	Village	Contractor Contact:	Tammy Mojica	Sec. Sec.			
LLW: 89232 Date	£ 9/27/2016	Spec Section:	4200	Telephone:	(631) 242-2760)	
	1				_		
Product Name	Manufacturer	and a second	Recycled	Percentage	Percentage	Regional''' Materials	n
		Material Cost (no Labor & Equip.)	Percentage Port Concurrent	Pre-	Regionally	and the second	Distance betwee
			by weight	Consumer"	Extracted***	Distance between project site	project site and
Type N (Standard) (for CMU)	Spec Mix	3	0%	by weight 2%	93 5 9	121/497/164/59 mile	s 68 mi
,(,	1		1		[secol		
				0+1			
efinitions:							
* Post-Consumer Recycled Content	: Material or finshed product that has	s served its intended consi	umer use and has	been discarded t	y consumer.		
Des Consumer Described Contrate	Deserved industrial and successful					and the second se	
and disposition Examples include fit	v-ash and synthetic gynsum because	e they are waste products	from coal burning e	electricity plants	(Scran raw mat	erials that can be	
reused in the same manufacturing or	ocess from which they are recovered	are not considered Pre-C	onsumer Recycled	(Content.)	(Serap raw man		
* Regional Materials: Regionally man are regionally mined, harvested, salv	nufactured materials that have their o aged or re-used (including those salv	origin within 500 miles of th vaged from the site.)	e project site. The	se would include	d products that		
lotee.							
Recycled content for concrete	de cost for cementitious materiale ar	d percentage of cementity	ous materials that	are recycled-cont	rent		
Recycled content for steel products -	where it is not possible to determine	recycled content use defa	ault assumption of	25% post-consum	ner recycled con	tent	
Regional content for concrete - provi	de combined cost for all concrete ma	terials and distance inform	nation requested.	ALCOLOGIC ALCOLOGIC	CONCEPTER DE VERS		
Regional content - for materials with Provide back-up documentation for in	varyone point of extraction all within t nformation on form above - such as p	the 500-mile radius list a si product cata or manufactur	ingle item with the rer's statements.	greatest distance	6		
ontractor Certification							

Contractor: Giaquinto Masonry

 I, Tammy mojica
 a duly authorized representative of
 Giaquinto Masonry, Inc.
 hereby certify that the material information

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 I understand that any change in such qualifications during the purchasing period will require prior written approval from the Construction Manager and Owner.

Tammy Mejica Signature of Authorized Representative:

Date:

9/27/2016

Page 133 of 272



Project: P.S. 49 Queens Contractor: Giaquinto Masonry Address: 6360 80th Street, Middle Village Contractor Contact: Tammy Mojica LLW: 89232 Date: 9/27/2016

Spec Section: 4200 Telephone: (631) 242-2760

	Sec. Sec. Sec. Sec. Sec. Sec. Sec. Sec.		Recycled (Recycled Content		Regional*** Materials				
Product Name	Manufacturer	Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site			
Type S (Standard) (for CMU)	Spec Mix	\$	0%	1%	95.8 9	121/497/164/59 miles	68 miles			

Definitions:

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Contractor Certification:

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> Tammy Mejica Signature of Authorized Representative: Date: 9/27/2016



School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens Address: 6360 80th Street, Middle Village

LLW: 89232 Date:

Contractor: Giaquinto Masonry

Contractor Contact: Dan Tavares

Spec Section: 4435 Telephone: 631-242-2760

			Recycled	Content	Regional*** Materials			
Product Name	me Manufacturer	Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site	
Cast Stone	Accurate Precast		12%	20%	80%	200 miles	4 miles	
				5 T t.,		miles	mile	
						miles	miles	
			2	() () () () () () () () () () () () () (miles	miles	
			1	1		miles	mile	
						miles	miles	

Definitions:

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Contractor Certification:

I, Daniel Tavares a duly authorized representative of Giaqunto Masonry hereby certify that the material information herein is an accurate representation of the material qualifications provided, as components of the final building construction. Furthermore, I understand that any change in such qualifications during the purchasing period will require prior written approval from the Construction Manager and Owner.

Signature of Authorized Representative: Daniel Tavares Date: 12/18/2017 Revised W. Jose Higgins of EME Group on 19Dec2017.

SCA School Construction Authority

NYC Green Schools Rating System

Project: P.S. 49 Queens Contractor: Giaquinto Masonry Address: 6360 80th Street, Middle Village Contractor Contact: Tammy Mojica LLW: 89232 Date: 9/27/2016

Spec Section: 4200 Telephone: (631) 242-2760

	Contraction of the		Recycled Content		Regional*** Materials					
Product Name	Manufacturer	Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distar and e	nce between projec xtraction site	site	Distance between project site and manufacture site	
Type S (Colored) (For Cast Stone)	Spec Mix	1	0%	2.3%	95.8%		68	miles	68 mile	

Definitions:

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Jammy Mojica Signature of Authorized Representative: Date: 9/27/2016

SCA School Construction Authority NYC Green Schools Rating System Orange County Ironworks, LLC

Project: P.S. 49 Queens

Address: 6360 80the Street, Middle Village

Contractor:

Matthew Haaksma

LLW: 89232 Date:

Contractor Contact: Spec Section: 05120 Telephone: (845) 769-3000

Concerns of the			Recycled Content		Regional*** Materials		
Product Name Manufacturer	Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site	
Structural Steel	Steel Dynamics		75%	22%	0%	>500 miles	>500 miles
							-

Definitions:

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Contractor Certification:

M. Haaksma a duly authorized representative of Orange County Ironworks, LLC hereby certify that the material information L herein is an accurate representation of the material qualifications provided, as components of the final building construction. Furthermore, I understand that any change in such qualifications during the purchasing period will require prior written approval from the Construction Manager and Owner.

> Signature of Authorized Representative: Matthew Haakama Date: 3/16/2018

School Construction Authority SCA) NYC Green Schools Rating System

Project: P.S. 49 Queens LLW: 89232 Date:

Address: 6360 80the Street, Middle Village

Orange County Ironworks, LLC Contractor: Contractor Contact:

Spec Section: 05710

Matthew Haaksma

(845) 769-3000 Telephone:

100 STA 40 H	Manufacturer Material Cost (no Labor & Equip.)		Recycled Content		Regional*** Materials		
Product Name		Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site	
Steel Stairs Material	Nucor	4	81.4%	15.1%	96.5%	208 miles	<500 miles
						-	

Definitions:

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Signature of Authorized Representative: Matthew Haaksma

Date: 3/19/2018





SCA School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens LLW: 89232 Date:

Address: 6360 80the Street, Middle Village

Contractor:

Spec Section: 05300

Contractor Contact:

Matthew Haaksma

3/16/2018

Orange County Ironworks, LLC

(845) 769-3000 Telephone:

Contractory of the			Recycled (Content		Regional*** Material	s
Product Name Manufacturer	Material Cost (no Labor & Equ <mark>i</mark> p.)	Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site	
Metal Deck	Canam	4	24%	9%	100%	< 500 miles	< 500 miles
1							
1.5		1				2	

Definitions:

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> Signature of Authorized Representative: Matthew Haaksma Date:

ction Authority s Rating System

Distance between project site and manufacture site

800 miles 715 miles 630 miles 46200

Project: PSIS49Q			Contractor:	Cabinets by D	esign, l	Inc.		
Address: 63-60 80th street, M	iddle Village, NY 11379	C	ontractor Contact:	Fari Vakili				
LLW: Date:	12Dec2017		Spec Section:		1	elephon	e:	
	N	1	Recycled	Content			Regional*** Materia	\$
Product Name	Manufacturer 06410-010-001	Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Per Reg Extra by	centage gionally acted*** weight	Distance between project site and extraction site	Distanc project : manufa
Hoover Treated Wood	Hoover, Inc. Thomson GA		0%					1.00
Adhesive - 3100 PVA	Wilsonart	2	1 A					/
aminate	Wilsonart - Fletcher NC		34%				-	1
Ferra NAF Particleboard	Flakeboard - Bennettsville SC	and -	4%	92%	Tons	k	-	
COLORI DIST DIM WOOD	Colom Dia product	3-7		00%	0%6	2	-	
Definitions: 06410- * Post-Consumer Recycled Con * Pre-Consumer Recy 06410 and disposition. Exa 06410	011-001 itent: Material or finshed product that have 0-006-001 0-006-002 PureBond	s served its intende iring materials diver te they are waste pr	d consumer use an ted from municipa oducts from coal b	nd has been dis solid waste for urning electrici	carded the pur	by consu pose of . (Scraj	umer. collection, recycling p raw materials that	can be
Definitions: 06410- * Post-Consumer Recycled Con ** Pre-Consumer Recycled Con and disposition. Exa 06410 reused in the same manoracom ** Regional Materials: Regionally are regional wined harvested	1 011-001 tent: Material or finshed product that har 0-006-001 0-006-002, PureBond ng process from which they are recovered y manufactured materials that have their of salvaged or re-used (including those salvaged or re-used)	s served its intende uring materials diver te they are waste pr d are not considered origin within 500 mil	d consumer use ai ted from municipa oducts from coal b il Pre-Consumer R es of the project si)	nd has been dis I solid waste for urning electrici ecycled Conter te. These wou	carded the pur ty plants nt.) d includ	by consu pose of , (Scraj led procu	urmer. collection, recycling o raw materials that ucts that	can be
Post-Consumer Recycled Con * Post-Consumer Recycled Con * Pre-Consumer Recy 06410 and disposition. Exa 06410 reused in the same manufactum ** Regional Materials: Regionally are regionally mined, harvested, Notes:	1 011-001 itent: Material or finshed product that have 0-006-001 0-006-002. PureBond ing process from which use are recovered y manufactured materials that have their of , salvaged or re-used (including those sal	s served its intende aring materials diver te they are waste pr d are not considered origin within 500 mil vaged from the site	d consumer use ai ted from municipa oducts from coal b d Pre-Consumer R es of the project si }	nd has been dis I solid waste foi urning electrici ecycled Conter te. These wou	carded the pur ty plants nt.) d includ	by consu pose of (, (Scra)	umer. collection, recycling o raw materials that ucts that	can be
Post-Consumer Recycled Con Pre-Consumer Recycled Con and disposition. Exa 06410 reused in the same manuratum Regional Materials: Regionally are regionally mined, harvested, Votes: Recycled content for concrete -	011-001 ttent: Material or finshed product that have 0-006-001 0-006-002. PureBond ng process from which use a recovered y manufactured materials that have their of , salvaged or re-used (including those salvered to be a	s served its intende uring materials diver te they are waste pr d are not considered origin within 500 mil vaged from the site	d consumer use ai ted from municipa oducts from coal b d Pre-Consumer R es of the project si) mentitious materia	nd has been dis I solid waste foi urning electrici ecycled Conter te. These wou uls that are recy	the pur y plants th.) d includ	by consu pose of a . (Scraj led procu	umer. collection, recycling p raw materials that ucts that	can be
Definitions: 06410- * Post-Consumer Recycled Con * Pre-Consumer Recycled Con and disposition. Exa 06410 reused in the same manoracum * Regional Materials: Regionally are regionally mined, harvested, Notes: 1 Recycled content for concrete - 2 Recycled content for steel produ	011-001 itent: Material or finshed product that have 0-006-001 0-006-002. PureBond solutions from which uses a recovered y manufactured materials that have their of , salvaged or re-used (including those salvaged or re-used (in	s served its intende uring materials diver te they are waste pr d are not considerer origin within 500 mil vaged from the site and percentage of ce a recycled content u	d consumer use au ted from municipa oducts from coal b d Pre-Consumer R es of the project si o) mentitious materia se default assump	I solid waste foi urning electrici ecycled Conter te. These wou uls that are recy tion of 25% po	the pur ty plants nt.) d includ cled-cos	by const pose of t (Scraj led proct intent.	umer. collection, recycling p raw materials that ucts that	can be
befinitions: 06410- * Post-Consumer Recycled Con * Pre-Consumer Recy 06410 and disposition. Exa 06410 reused in the same memorator ** Regional Materials: Regionally are regionally mined, harvested, Notes: 1 Recycled content for concrete - 2 Recycled content for concrete - 3 Regional content for concrete - 1	011-001 ttent: Material or finshed product that have 0-006-001 0-006-002. PureBond ng process from which uses are recovered y manufactured materials that have their of , salvaged or re-used (including those sat provide cost for cementitious materials are ucts - where it is not possible to determine provide combined cost for all concrete ma	s served its intende uring materials diver te they are waste pr d are not considered origin within 500 mil vaged from the site and percentage of ce a recycled content u aterials and distance	d consumer use au ted from municipa oducts from coal b d Pre-Consumer R es of the project si) mentitious materia se default assump a information reque	I solid waste for urning electrici ecycled Conter te. These wou uls that are recy stion of 25% po- ested.	the pur ty plants tt.) d includ cled-coist	by const pose of t (Scraj led proct intent.	urmer. collection, recycling p raw materials that ucts that ycled content	can be
befinitions: 06410- * Post-Consumer Recycled Con * Pre-Consumer Recy 06410 and disposition. Exa 06410 reused in the same memorator ** Regional Materials: Regionally are regionally mined, harvested, Notes: 1 Recycled content for concrete - 2 Recycled content for concrete - 2 Recycled content for concrete - 4 Regional content - for materials	011-001 itent: Material or finshed product that has 0-006-001 0-006-002. PureBond ng process from writer uney are recovered y manufactured materials that have their of , salvaged or re-used (including those sal provide cost for cementitious materials are ucts - where it is not possible to determine provide combined cost for all concrete re with varyone point of extraction all within	s served its intende aring materials diver te they are waste pr d are not considered origin within 500 mil vaged from the site and percentage of ce a recycled content u aterials and distance the 500-mile radius	d consumer use au ted from municipa oducts from coal b d Pre-Consumer R es of the project si) mentitious materia se default assump a information reque list a single item v	I solid waste for urning electrici ecycled Conter te. These wou uls that are recy ution of 25% po- ssted. with the greates	carded the pur y plants it.) d includ cled-coi st-consu	by consu pose of (. (Scra) led procu ntent. imer recy ce.	urmer. collection, recycling o raw materials that ucts that ycled content	can be
befinitions: 06410- * Post-Consumer Recycled Con * Pre-Consumer Recy 06410 and disposition. Exa 06410 reused in the same memorator ** Regional Materials: Regionally are regionally mined, harvested, Notes: 1 Recycled content for concrete - 2 Recycled content for concrete - 2 Recycled content for concrete - 4 Regional content - for materials 5 Provide back-up documentation	011-001 itent: Material or finshed product that has 0-006-001 0-006-002. PureBond ng process from which uses are recovered y manufactured materials that have their of , salvaged or re-used (including those sal provide cost for cementitious materials are ucts - where it is not possible to determine provide combined cost for all concrete reas with varyone point of extraction all within for information on form above - suc ²	s served its intende uring materials diver te they are waste pr d are not considered origin within 500 mil vaged from the site and percentage of ce a recycled content u aterials and distance the 500-mile radius product data or mar	d consumer use au ted from municipa oducts from coal b d Pre-Consumer R es of the project si) mentitious materia se default assump a information reque list a single item v utfacturer's statem	I solid waste for urning electrici ecycled Conter te. These wou us that are recy stion of 25% po- seted. with the greates ents.	carded the pur ty plants it.) d includ cled-coi st-consu	by consu pose of a . (Scraj led procu ntent. amer recy ce.	urmer. collection, recycling p raw materials that ucts that ycled content	can be
Definitions: 06410- * Post-Consumer Recycled Con * Pre-Consumer Recycled Con and disposition. Exa 06410 reused in the same memoratum * Regional Materials: Regionally are regionally mined, harvested, Notes: 1 Recycled content for concrete - 2 Recycled content for concrete - 2 Recycled content for concrete - 3 Regional content for concrete - 4 Regional content for concrete - 5 Provide back-up documentation Contractor Certification:	011-001 itent: Material or finshed product that have 0-006-001 0-006-002. PureBond ng process from whiter uncy are recovered y manufactured materials that have their of , salvaged or re-used (including those salvaged or re-used	s served its intende uring materials diver se they are waste pr d are not considered origin within 500 mil vaged from the site and percentage of ce a recycled content u aterials and distance the 500-mile radius oroduct data or mar	d consumer use ai ted from municipa oducts from coal b d Pre-Consumer R es of the project si) mentitious materia se default assump a information reque list a single item v sufacturer's statem	I solid waste for urning electrici ecycled Conter te. These wou uls that are recy tion of 25% po- asted. with the greates ents.	carded the pur ty plants tt.) d includ cled-co st-consu t distance	by const pose of the construction of the const	umer. collection, recycling p raw materials that ucts that ycled content	can be

Signature of Authorized Representative: William Jose Digtally signed by William lose Higgs Date: Entransi du-Green Team, amail-phigginseremegrop.com.c-US Data 2017.12.12.11.18.27-0510 Higgins 05/01/09 This form may be downloaded from SCA web site

SCA School Construction Authority

NYC Green Schools Rating System

Project: PS 49 MIDDLE VILLAGE

LLW: 089232 Date:

Address: 63-60 80th St., Middle Village, NY 11379

Contractor Contact: April Manalo

Sub - Contractor: Darcon Construction, Inc.

Spec Section: 03300 Telephone: 516-358-2533

Building Manage	1000		Recycled Content		Regional*** Materials			
Product Name	Manufacturer	Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site	
Styrofoam Square Edge	DOW	5	0%	0%	0%	>500 miles	>500 mile	
							2	
	-				_			
					-			
			-	-			-	

Definitions:

* Post-Consumer Recycled Content: Material or finshed product that has served its intended consumer use and has been discarded by consumer.

* Pre-Consumer Recycled Content: Recovered industrial and manufacturing materials diverted from municipal solid waste for the purpose of collection, recycling and disposition. Examples include fly-ash and synthetic gypsum, because they are waste products from coal burning electricity plants. (Scrap raw materials that can be reused in the same manufacturing process from which they are recovered are not considered Pre-Consumer Recycled Content.)

*** Regional Materials: Regionally manufactured materials that have their origin within 500 miles of the project site. These would included products that are regionally mined, harvested, salvaged or re-used (including those salvaged from the site.)

Notes:

- Recycled content for concrete provide cost for cementitious materials and percentage of cementitious materials that are recycled-content, 1
- 2 Recycled content for steel products where it is not possible to determine recycled content use default assumption of 25% post-consumer recycled content
- 3 Regional content for concrete provide combined cost for all concrete materials and distance information requested.
- 4 Regional content for materials with varyone point of extraction all within the 500-mile radius list a single item with the greatest distance.
- 5 Provide back-up documentation for information on form above such as product data or manufacturer's statements.

Contractor Certification:

I, April Manalo a duly authorized representative of Darcon Construction, Inc. hereby certify that the material information herein is an accurate representation of the material qualifications provided, as components of the final building construction. Furthermore, I understand that any change in such qualifications during the purchasing period will require prior written approval from the Construction Manager and Owner.

34

Signature of Authorized Representative

Date: 3.8.2016

REVIEWED FOR SUBALISSION PS/ID-49 Queet: SCA Contract #: C000014133 LLW#089232 Ξ Submittal # 07211-002-001 3/21/16

SCA **School Construction Authority** NYC Green Schools Rating System

Project: PS 49 MIDDLE VILLAGE

Product Name

Address: 63-60 80th St., Middle Village, NY 11379

LLW: 089232 Date:

Sub - Contractor: Darcon Construction, Inc. Contractor Contact: April Manalo

Telephone: 516-358-2533 Spec Section: 03300 Regional*** Materials Recycled Conten! Manufacturer Percentage Material Cost (no Percentage Percentage Regionally Extracted*** Distance between Distance between Labor & Equip.) st-Consume re-Consun project site and project site and by weight by weight by weight extraction site nanufacture site Owens Corning <500 mile: <500 miles

Definitions:

Foamular 250

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Signature of Authorized Representative:

Date: 3.8.2016



89232 Date:



Contractor: CBI Drywall Corp

CA School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

LLW:

Address: 6360 80the Street, Middle Village

Spec Section: 07 21 20

Telephone: (631) 491-4700

Product Name	1 N N N N N N N N N N N N N N N N N N N	Material Cost (no Labor & Equip.)	Recycled Content		Regional" ** Materials			
	Manufacturer		Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site	
Sound Attenuation Insulation	Thermafiber	4	0%	70%	0%	>500 miles	625.32 miles	
the second s	and a literature and an annual second					miles	miles	
						miles	miles	
			-			miles	miles	
						miles	miles	
	- 1 * 1					miles	miles	

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I understand that any change in such qualifications during the purchasing period will require prior written approval from the	Construction Manager and Owner.

Signature of Authorized Representative:

89232 Date:



SCA School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

LLW:

Address: 6360 80the Street, Middle Village

Contractor: CBI Drywall Corp

Spec Section: 07 21 20

Contractor Contact: Shaun Hawes

Telephone: (631) 491-4700

	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Material Cost (no Labor & Equip.)	Recycled Content		Regional*** Materials			
Product Name	Manufacturer		Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site	
Firespan 40 Foil Faced Ins	Thermafiber	4	0%	70%	0%	>500 miles	625.32 miles	
	-					miles	miles	
						miles	miles	
	- 4. · · · · · · · · · · · · · · · · · ·					miles	miles	
			-			miles	miles	
						miles	miles	

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Signature of Authorized Representative:



SCA **School Construction Authority** NYC Green Schools Rating System

Project: P.S. 49 Queens

LLW:

Contractor: CBI Drywall Corp

Address: 6360 80the Street, Middle Village

89232 Date:

Spec Section: 07 21 20

Telephone: (631) 491-4700

*** 727			Recycled (Content		Regional" ** Materia	ls
Product Name	Manufacturer	Material Cost (no Labor & Equip.)	Percentage Post-Consumer by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
Firespan 40 Foil Faced Ins	Thermafiber	4	0%	70%	0%	>500 miles	625.32 miles
						miles	i miles
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				· · · · · · · · · · · · · · · · · · ·		miles	i miles
2 · · · · · · · · · · · · · · · · · · ·						miles	miles
						miles	miles
						miles	; miles

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Contractor Certification:

hereby certify that the material information a duly authorized representative of I. herein is an accurate representation of the material qualifications provided, as components of the final building construction. Furthermore, I understand that any change in such qualifications during the purchasing period will require prior written approval from the Construction Manager and Owner.

Signature of Authorized Representative:

89232 Date:



Contractor: CBI Drywall Corp

SCA School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

LLW:

Address: 6360 80the Street, Middle Village

Contractor Contact: Shaun Hawes

Spec Section: 07 21 20

Telephone: (631) 491-4700

			Recycled (Content		Regional" " Materia	s
Product Name	Manufacturer	Material Cost (no Labor & Equip.)	Percentage Post-Consumer by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extractod*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
2" 700 Series Fiberglass Ins	Owens Corning	5	0%	57%	-	miles	517.5 mile
						miles	mile
				· - · · · · · · · · · · · · · · · · · ·		miles	mile
				/ .		miles	mile
		- 14 July				miles	mile
						miles	mile

Definitions:

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- 4 Regional content for materials with varyone point of extraction all within the 500-mile radius list a single item with the greatest distance.
- 5 Provide back-up documentation for information on form above such as product data or manufacturer's statements.

Contractor Certification:

I, Shaun Hawes	a duly authorized representative of	CBI Drywall Corp.	hereby certify that the material information
herein is an accurate repr	esentation of the material qualifications provid	ed, as components of the fi	nal building construction. Furthermore,
I understand that any cha	ange in such qualifications during the purchasi	ng period will require prior w	ritten approval from the Construction Manager and Owner.

Signature of Authorized Representative:

Date: 3/28/2017



Contractor: CBI Drywall Corp

SCA School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

LLW:

Address: 6360 80the Street, Middle Village

89232 Date:

Contractor Contact: Shaun Hawes Spec Section: 07 21 20

Telephone: (631) 491-4700

			Recycled (Content		Regional"** Materia	S
Product Name	Manufacturer	Material Cost (no Labor & Equip.)	Percentage Post-Consumer by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted by weight	Distance between project site and extraction site	Distance between project site and manufacture site
2" 700 Series Fiberglass Ins	Owens Corning	\$	0%	57%		miles	517.5 miles
						miles	miles
		- 14				miles	miles
				1		miles	miles
				, ————————————————————————————————————		miles	miles
	- A 1.		(miles	miles

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Contractor Certification:

I, Shaun Hawes	a duly authorized representative of	CBI Drywall Corp.	hereby certify that the material information
herein is an accurate representation of the material qualifications provided, as components of the final building construction. Furthermore,			
I understand that any change in such qualifications during the purchasing period will require prior written approval from the Construction Manager and Owner.			

Signature of Authorized Representative:

Date: 3/28/2017


School Construction Authority

NYC Green Schools Rating Syster

Project PS 49 Queens Addition

Address: 63-60 80th St, Middle Village, NY 11379

LLW: 89232 Date: 2/7/2018

Contractor: EW Howell Contractor Contact: Molly Rooney

Spec Section: 7250

Telephone: (516) 921-7100 ext. 125

	Manufacturer Matenal Cost (no Perce Labor & Equip.) Post-Cor by w	Recycled (Recycled Content		Regional*** Materials		
Product Name		Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
CAFCO 300 Fireproofing	Isolatek	S	10%	0%	100%	159 miles	46 miles
CAFCO 400 Fireproofing	Isolatek	1	10%	0%	100%	159 miles	46 miles
						miles	miles
						miles	miles
						miles	mile
						miles	miles

Definitions:

* Post-Consumer Recycled Content: Material or finshed product that has served its intended consumer use and has been discarded by consumer.

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- 5 Provide back-up documentation for information on form above such as product data or manufacturer's statements.

Contractor Certification:

I, W. Jose Higgins	a duly authorized representative of	EME Group		hereby certify that the material information
herein is an accurate re	presentation of the material qualifications p	rovided, as components of the	final building construction.	Furthermore,
I understand that any ch	ange in such qualifications during the pur	chasing period will require prio	or written approval from the	Construction Manager and Owner.
	Signature of Authorized Representat	we: William Jose Higgins	Events and a second sec	Date:



SCA School Construction Authority NYC Green Schools Rating System

Project:	Project: P.S. 49 Queens			
Address:	6360 80th St	reet, Middle Village		
LLW	89232	Date:	5/10/2018	

LLW: 89232 Date:

Contractor: Giaquinto Masonry Contractor Contact: Tammy Mojica

> Spec Section: 7270 Telephone: (631) 242-2760

6.4.6. 10.00.2.2	Product Name Manufacturer	acturer Material Cost (no Labor & Equip.)	Recycled Content		Regional*** Materials		
Product Name			Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
Mineral Wool	Hilti	1	0%	90%	0%	ó	626 mile
and the second second	-					-	

Definitions:

* Post-Consumer Recycled Content: Material or finshed product that has served its intended consumer use and has been discarded by consumer.

** Pre-Consumer Recycled Content: Rec	covered industrial and manufacturing materials diverted from municip	oal solid waste for the purp	ose of collection, recycling
and disposition. Examples include fly-as	sh and synthetic gypsum, because they are waste products from coal	burning electricity plants.	(Scrap raw materials that can be
reused in the same manufacturing proce	ess from which they are recovered are not considered Pre-Consumer	Recycled Content.)	

*** Regional Materials: Regionally manufactured materials that have their origin within 500 miles of the project site. These would included products that are regionally mined, harvested, salvaged or re-used (including those salvaged from the site.)

Notes:

- 1 Recycled content for concrete - provide cost for cementitious materials and percentage of cementitious materials that are recycled-content.
- 2 Recycled content for steel products where it is not possible to determine recycled content use default assumption of 25% post-consumer recycled content
- 3 Regional content for concrete provide combined cost for all concrete materials and distance information requested.
- 4 Regional content for materials with varyone point of extraction all within the 500-mile radius list a single item with the greatest distance.
- 5 Provide back-up documentation for information on form above such as product data or manufacturer's statements.

Contractor Certification:

a duly authorized representative of Giaquinto Masonry, Inc. hereby certify that the material information I, Tammy Mojica herein is an accurate representation of the material qualifications provided, as components of the final building construction. Furthermore, I understand that any change in such qualifications during the purchasing period will require prior written approval from the Construction Manager and Owner.

Signature of Authorized Representative:

Jammy Mojica

Date: 5/10/2018

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School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

Address: 6360 80the Street, Middle Village

LLW: 89232 Date:

Contractor: KJC Waterproofing

Contractor Contact: Bob Pitiger Spec Section: 07560

This form may be downloaded from SCA web site

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Telephone: 201-384-8859

The second se	Product Name Manufacturer		Recycled Content		Regional*** Materials		
Product Name		Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
790-11 EV	Henry Company	3	25%	0%	0%	>500 miles	375 miles
Foamular 604 Insulation	Owens Corning	1	0%	20%	100%	<500 miles	<500 mile:
DB 200S	Henry Company		0%	74%	0%	unknown	655 miles
1				11.00		miles	mile
						miles	mile
						miles	mile

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- 5 Provide back-up documentation for information on form above such as product data or manufacturer's statements.

Contractor Certification:

 I, Bob Pitiger
 a duly authorized representative of KJC Waterproofing
 hereby certify that the material information herein is an accurate representation of the material qualifications provided, as components of the final building construction. Furthermore,

 I understand that any change in such qualifications during the purchasing period will require prior written approval from the Construction Manager and Owner.

 Signature of Authorized Representative:
 Date: 10/3/2016

05/01/09

Page 150 of 272

School Construction Authority

Project: P.S. 49 Queens

Address: 6360 80the Street, Middle Village Date: Mag LLW: 89232 2 201

Spec Section: 08/11/3 Telephone: 5/6-

Percentage Regionally

ephone: <u>S/6-390-6800</u> Regional^{***} Materials

Distance between

Distance betwe

	V				
	1		Recycled	Content	Γ
Product Name	Manufacturer	Matenal Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre- Consumer**	

		1	by weight	Consumer** by weight	Extracted*** by weight	extraction site	manufacture site
HM Doord + Framel	LIF Industries	- 1 - E	25.5%	6.8%/0	100%	82 miles	/6 miles
						miles	miles
						miles	miles
						miles	miles
Ve				·		miles	miles
				-		miles	miles

Contractor:

Contractor Contact:

Definitions:

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and disposition. Examples include	fly-ash and synthetic gypsum, because they are waste products from coal burning electricity plants.	(Scrap raw materials that can be
reused in the same manufacturing p	process from which they are recovered are not considered Pre-Consumer Recycled Content.)	

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Contractor Certification:

herein is an accurate representation of the material qualifications provided, as components of the final building construction. Furthermore, I understand that any change in such qualifications during the purchasing period will require prior written approval from the Construction Manager and Owner.

Signature of Authorized Representative:

Date: May 2, 2010

SCA School Construction Authority

NYC Green Schools Rating System

Project P.S. 49 Queens

Contractor:	Able	Rolling	Steel Doo	r, Inc
	0.000	100.000		

Address: 6360 80the Street, Middle Village

Contractor Contact:	Chrs Hoehn	7

LLW: 89232 Date:

Spec Section:		
	Recycled Content	Regional*** Materials

Product Name	Manufacurer	Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted by weight	Distance between project site and extraction site	Distance between project site anc manufacture site
Overhead Coiling Door	CornellCookson	4	54%	8%	N/A.	N/A	129
						miles	miles
				1		miles	miles
						miles	miles
			· · · · · · · · · · · · · · · · · · ·	1		miles	miles
					11	miles	miles

Definitions:

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Post-Consumer Recycled Content: Material or finshed product that has served its intended consumer use and has been discarded by consumer.

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- Recycled content for steel products where it is not possible to determine recycled content use default assumption of 25% post-consumer recycled content 2
- Regional content for concrete provide combined cost for all concrete materials and distance information requested. 3
- Regional content for materials with varyone point of extraction all within the 500-mile radius list a single item with the greatest distance 4
- 5 Provide back-up documentation for information on form above such as product data or manufacturer's statements.

Contractor Certification:

a duly authorized representative of Able Rolling Steel Door, Inc. hereby certify that the material information I, Chris Hoehn herein is an accurate representation of the material qualifications provided, as components of the final building construction. Furthermore, I understand that any change in such qualifications during the purchasing period will require prior written approval from the Construction Manager and Owner.

Date: 10/24/17 Signature of Authorized Representative:





Project: P.S. 49 Queens

Address: 6360 80the Street, Middle Village

LLW: 89232 Date: 4/18/2018

Contractor: Craftsman Storefronts & Glass Inc.

Contractor Contact: Steve Sagginario
Spec Section: 8710

Telephone: 631-667-1420

	Manufacturer	Material Cost (no Labor & Equip.)	Recycled Content		Regional*** Materials		
Product Name			Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
push plates	Assa Abloy / Rockwood	1	56%	26%	-	miles	340 miles
Closers	Allegion / LCN		56.9	31.4		miles	896 miles
Holder and Stop	Allegion / Glynn Johnson		56.9	31.4	_	miles	719 miles
						miles	miles
						miles	miles
						miles	miles

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Contractor Certification:

I, _____a duly authorized representative of

herein is an accurate representation of the material qualifications provided, as components of the final building construction. Furthermore,

I understand that any change in such qualifications during the purchasing period will require prior written approval from the Construction Manager and Owner.

Signature of Authorized Representative:

Date:

hereby certify that the material information

SCA School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

Address: 6360 80the Street, Middle Village

LLW: 89232 Date: 4/18/2018

Contractor: Craftsman Storefronts & Glass Inc.

Contractor Contact: Steve Sagginario Spec Section: 8810

Telephone: 631-667-1420

Product Name	Manufacturer	Material Cost (no Labor & Equip.)	Recycled Content		Regional*** Materials		
			Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
1 1/8 clear double lami	Oldcastle Building Envelope	5	0%	3%		322/806/117 miles	511 miles
1 13/16 clear low-e double lami	Oldcastle Building Envelope	5	0%	3%		322/806/117 miles	511 miles
1 5/32 clear spandrel double lan	Oldcastle Building Envelope	5 1	0%	4%		806/117 miles	511 miles
19/32 clear monolithic lami	Oldcastle Building Envelope	1 1	0%	3%		806/117 miles	511 miles
firelite	TGP	3 1	0%	60%		miles	miles
A						miles	miles

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Contractor Certification;

a duly authorized representative of E,

hereby certify that the material information

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Signature of Authorized Representative:

Date:

SCA School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

Address: 6360 80the Street, Middle Village

LLW: 89232 Date: 4/18/2018

Contractor: Craftsman Storefronts & Glass Inc.

Contractor Contact: Steve Sagginario

Spec Section: 8920

Telephone: 631-667-1420

Product Name	Manufacturer		Recycled Content		Regional*** Materials		
		Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
aluminum extrusions	Kawneer Company	2	11%	62%		1223 miles	1313 miles
aluminum extrusions	Kawneer Company		14	60		1223 miles	1313 miles
aluminum extrusions	Kawneer Company		2	65		819 miles	509 miles
aluminum extrusions	Kawneer Company		7	63		1223 miles	1313 miles
aluminum extrusions	Kawneer Company		7	63		1223 miles	1313 miles
						miles	miles

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Contractor Certification:

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 I understand that any change in such qualifications during the purchasing period will require prior written approval from the Construction Manager and Owner.

Signature of Authorized Representative:

Date:



Contractor: CBI Drywall Corp

SCA **School Construction Authority** NYC Green Schools Rating System

Project: P.S. 49 Queens

LLW: 89232 Date:

Address: 6360 80the Street, Middle Village

Contractor Contact: Shaun Hawes

Spec Section: 09260

Telephone: (631) 491-4700

Product Name	Manufacturer	Material Cost (no Labor & Equip.)	Recycled Content		Regional*** Materials		
			Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted by weight	Distance between project site and extraction site	Distance between project site and manufacture site
Metal Stud Framing	Clark Dietrich	\$	39.6%	6 8.7%	43.9%	104 miles	101 miles
						miles	miles
			_			miles	miles
				1		miles	miles
			-	1		miles	miles
						miles	miles

Definitions:

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Contractor Certification:

1, Shaun Hawes	a duly authorized representative of	CBI Drywall Corp	hereby certify that the material information
herein is an accurate	representation of the material qualifications	provided, as components of the fi	nal building construction. Furthermore,
I understand that any	change in such qualifications during the pu	rchasing period will require prior w	ritten approval from the Construction Manager and Owner.
	Signature of Authorized Representative:	Shaw Haver	Date: 9/1/2016

N

SCA School Construction Authority NYC Green Schools Rating System

miles

miles

Project: P.S. 49 Queens

Address: 6360 80the Street, Middle Village

Contractor: CBI Drywall Corp

Contractor Contact: Shaun Hawes

LLW: 89232	Date:		Spec Section:	09260	Telephone:	(631) 491-4700	6
The standard	The second second		Recycled Content		Regional*** Materials		
Product Name	Manufacturer	Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
Metal Stud Framing	Marino/Ware	S	19.8%	14.4%	36.90%	64 miles	30 mile:
a second s				1 C. 1		miles	miles
					-	miles	miles
		[] [S	1		miles	miles
				·		milos	milos

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Contractor Certification:

I, Shaun Hawes	a duly authorized representative of	CBI Drywall Corp	hereby certify that the material information	
herein is an accurate	representation of the material qualification	s provided, as components of the	final building construction. Furthermore,	
I understand that any	change in such qualifications during the p	urchasing period will require prior	r written approval from the Construction Manager and Owner.	

Signature of Authorized Representative: Aum Human Date: 9/1/2016



Contractor: CBI Drywall Corp

School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

LLW:

Address: 6360 80the Street, Middle Village

89232 Date:

Contractor Contact: Shaun Hawes

Spec Section: 09260

Telephone: (631) 491-4700

Product Name	Manufacturer N		Recycled Content		Regional*** Materials		
		Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
Grounds Blocking	Marino/Ware	5	19.8%	14.4%	36.90%	64 miles	30 miles
						miles	miles
		- 1				miles	miles
						miles	miles
						miles	miles
						miles	miles

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Contractor Certification:

I, Shaun Hawes	a duly authorized representative of	CBI Drywall Corp	hereby certify that the	e material information
herein is an accurate	representation of the material qualification	s provided, as components of the fi	inal building construction. Furthermore) ,
I understand that any	y change in such qualifications during the p	urchasing period will require prior v	written approval from the Construction	Manager and Owner.
	Signature of Authorized Representative	: Shewen Hermen	Date:	9/1/2016



Contractor: CBI Drywall Corp

SCA School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

Address: 6360 80the Street, Middle Village

Contractor Contact: Shaun Hawes

LLW: 89232 Date:

Spec Section: 09260

Telephone: (631) 491-4700

	Manufacturer Clark Dietrich		Recycled Content		Regional*** Materials			
Product Name		Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site	
Furring Channel		3	39.6%	8.7%	43.9%	104 miles	101 miles	
COLUMN COLUMN			-	11	-	miles	miles	
				11		milos	milos	
						miles	miles	
						miles	miles	
						miles	miles	

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Contractor Certification:

I, Shaun Hawes	a duly authorized representative of	CBI Drywall Corp	hereby	certify that the material information
herein is an accurate re	presentation of the material qualifications	provided, as components of the	final building construction	. Furthermore,
I understand that any o	change in such qualifications during the pl	urchasing period will require prior	written approval from the	Construction Manager and Owner.

Signature of Authorized Representative:

Date:

9/1/2016



Contractor: CBI Drywall Corp

SCA School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

LLW:

Address: 6360 80the Street, Middle Village

89232 Date:

Contractor Contact: Shaun Hawes

Spec Section: 09260

Telephone: (631) 491-4700

Product Name	Manufacturer Material C Labor & E		Recycled Content			Regional*** Materials		
		Material Cost (no Labor & Equip.)	Percentage Post-Consumer by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site	
Shaft Wall Framing	Clark Dietrich	\$	39.6%	8.7%	43.9%	104 miles	101 miles	
						miles	miles	
			1	P		miles	miles	
				11		miles	miles	
			1	1		miles	miles	
						miles	miles	

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I understand that any	change in such qualifications during the pu	rchasing period will require prior w	itten approval from the Construction Manager and Owner.
	Signature of Authorized Representative:	Shanne Hanner	Date: 9/1/2016

Signature of Authorized Representative:

Date: 9/1/2016

CONTRACTOR'S SUSTAINABLE MATERIALS FORM Credit M 2.1R, M 2.2, M2.3R and M2.4 SCA School Construction Authority CH1 NYC Green Schools Rating System Project: P.S. 49 Queens *** 09260-006-002 Contractor: CBI Drywall Corp

10/17/16

Address: 6360 80the Street, Middle Village

LLW: 09232 Date:

Spec Section: 09260

Contractor Contact: Shaun Hawes

Telephone: (631) 491-4700

Product Name	Manufacturer Material Cost Labor & Equ		Recycled Content		Regional*** Materials		
		Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
Spazzer Bar	Clark Dietrich	\$	39.6%	8.7%	43.9%	104 miles	101 miles
Hirizontal Bridging			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			miles	miles
						miles	miles
	15			1		miles	miles
						miles	miles
	11 12	12112				miles	miles

Definitions:

* Post-Consumer Recycled Content: Material or finshed product that has served its intended consumer use and has been discarded by consumer.

- ** Pre-Consumer Recycled Content: Recovered industrial and manufacturing materials diverted from municipal solid waste for the purpose of collection, recycling and disposition. Examples include fly-ash and synthetic gypsum, because they are waste products from coal burning electricity plants. (Scrap raw materials that can be reused in the same manufacturing process from which they are recovered are not considered Pre-Consumer Recycled Content.)
- *** Regional Materials: Regionally manufactured materials that have their origin within 500 miles of the project site. These would included products that are regionally mined, harvested, salvaged or re-used (including those salvaged from the site.)

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- 2 Recycled content for steel products where it is not possible to determine recycled content use default assumption of 25% post-consumer recycled content
- 3 Regional content for concrete provide combined cost for all concrete materials and distance information requested.
- 4 Regional content for materials with varyone point of extraction all within the 500-mile radius list a single item with the greatest distance.
- 5 Provide back-up documentation for information on form above such as product data or manufacturer's statements.

Contractor Certification:

I, Shaun Hawes	a duly authorized representative of	CBI Drywall Corp	hereby	certify that the material information
herein is an accurate n	epresentation of the material qualifications	s provided, as components of the	e final building construction	. Furthermore,
I understand that any	change in such qualifications during the p	urchasing period will require pri	or written approval from the	Construction Manager and Owner.

Signature of Authorized Representative:

Date: 9/1/2016

NY

SCA School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

LLW:

Contractor: CBI Drywall Corp

Address: 6360 80the Street, Middle Village

89232 Date:

Contractor Contact: Shaun Hawes

Spec Section: 09260

Telephone: (631) 491-4700

Product Name	Manufacturer Material Cost (no Labor & Equip.)		Recycled Content		Regional*** Materials		
		Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site	
Thermafiber SAFB	Thermafiber	1	0%	70%	0.15%	miles	708 miles
1 - Sec Sec 1 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5						miles	miles
						miles	miles
						miles	miles
						miles	miles
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Signature of Authorized Representative: Acument Date: 9/1/2016



Contractor: CBI Drywall Corp

SCA School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

LLW: 89232 Date:

Address: 6360 80the Street, Middle Village

Contractor Contact: Shaun Hawes

Spec Section:

Telephone: (631) 491-4700

	the second se		Recycled	Content	Regional*** Materials		
Product Name	Manufacturer	Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted"" by weight	Distance between project site and extraction site	Distance between project site and manufacture site
5/8" Mold Tough Sheetrock	USG	S	4.9%	92.9%	93.072%	<=500 miles	148 miles
5/8" Mold Defense Sheetrock	Lafarge	\$	39	96%		271 miles	47 miles
5/8" Gold Bond XP Sheetrock	National Gypsum	\$	59	0%	95%	>500 miles	66 miles
						miles	miles
2	2			8		miles	miles
						miles	miles

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Signature of Authorized Representative:

Date: 9/1/2016



Contractor: CBI Drywall Corp

SCA School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

Address: 6360 80the Street, Middle Village

LLW: 89232 Date:

Contractor Contact: Shaun Hawes

Spec Section:

Telephone: (631) 491-4700

Product Name	Manufacturer Material Cost (Labor & Equip		Recycled Content		Regional*** Materials		
		Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
1" Mold Tough Shaft Liner	USG	\$	2.1%	96,6%	96.811%	<=500 miles	176 miles
1" Mold Defense Shaft Liner	Lafarge	\$	3%	96%		271 miles	47 miles
1" Gold Bond XP Shaft Liner	National Gypsum	\$	5%	0%		>500 miles	66 miles
		1		9		miles	miles
						miles	miles
1				-	c	miles	miles

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Signature of Authorized Representative: Acum Acume Date: 9/1/2016



Contractor: CBI Drywall Corp

SCA School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

LLW:

Address: 6360 80the Street, Middle Village

89232 Date:

Contractor Contact: Shaun Hawes

Spec Section:

Telephone: (631) 491-4700

Product Name	Manufacturer Materia Labor		Recycled Content		Regional*** Materials		
		Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
5/8" Glass-Mat Panels	USG	\$	0.0%	96.3%	96.638%	<=500 miles	176 miles
The second se	- 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10					miles	miles
						miles	miles
						miles	miles
						miles	miles
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	Signature of Authorized Representative	: Shawe Haven	Date: 9/1/2016



Contractor: CBI Drywall Corp

SCA School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

LLW:

Address: 6360 80the Street, Middle Village

89232 Date:

Spec Section:

Contractor Contact: Shaun Hawes

Telephone: (631) 491-4700

Product Name	Manufacturer Mater Labo		Recycled Content		Regional*** Materials		
		Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
1" Glass Mat Shaft Wall Liner	USG	\$	0.0%	96.3%	96.638%	<=500 miles	176 miles
					1000	miles	miles
						miles	miles
						miles	miles
						miles	miles
				1		miles	miles

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	Signature of Authorized Representative	shame Hanner	Date: 9/1/2016

Signature of Authorized Representative:

9/1/2016



Contractor: CBI Drywall Corp

School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

10,001. 1.0. 40 400010

Contractor Contact: Shaun Hawes

Address: 6360 80the Street, Middle Village

LLW: 89232 Date:

Spec Section:

Telephone: (631) 491-4700

Product Name	1 2 4 4	Materiai Cost (no Labor & Equip.)	Recycled Content		Regional*** Materials		
	Manufacturer		Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
5/8' Fiberock Aqua-Tough	USG	\$	2.7%	23.4%	15.743%	<=500 miles	354 miles
5/8" Hi-Impact XP	National Gypsum	\$	5%	0%	95%	>500 miles	66 miles
5/8" Protecta AR 100	Lafarge	S	3%	96%		272 miles miles	48 miles miles
						miles	miles
				1		miles	miles

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Shanne Hanne

Signature of Authorized Representative:

Date:

9/1/2016

Page 167 of 272

CONTRACTOR'S SUSTAINABLE MATER Credit M 2.1R, M 2.2, M2.3R and M2.4 Project: P.S. 49 Queens		VEWED FOR SIDNESSION PS IS 47 Queen CS Outstat # COMMULES ILE SWITCH HOOWELLL	Contractor	CBI Drywall Co	SCA Scl NY	hool Construc C Green Schools	tion Authority Rating System
Address: 6360 80the Street, Middle Villag	e submitta	10/18-16	Contractor Contact:	Shaun Hawes	11 C		
LLW: 89232 Date:			Spec Section:		Telephon	e: (631) 491-4700)
	- 20 C		Recycled	Content		Regional*** Materia	Is
Product Name	Manufacturer	Material Cost (no	Percentage	Percentage	Percentage	Distance between	Distance between

		Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
5/8' Cement Tile Backer Board	USG	\$	0.0%	15.4%	86.417%	<=500 miles	176 miles
5/8" Perma Base Tile Backer	National Gypsum	\$	0%	35%	35%	300 miles	322 miles
				9 A		miles	miles
						miles	miles
B	1 Parts					miles	miles

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Page 168 of 272



Contractor: CBI Drywall Corp

SCA School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

Address: 6360 80the Street, Middle Village

LLW: 89232 Date:

Spec Section: 09260

Telephone: (631) 491-4700

	111 JUL-52-585	Manufacturer Material Cost (no Labor & Equip.)	Recycled Content		Regional*** Materials		
Product Name	Manufacturer		Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
Metal Drywall Trims	Marino/Ware	1	19.8%	14.4%	36,90%	64 miles	30 miles
						miles	miles
						miles	miles
			-			miles	miles
						miles	miles
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	Signature of Authorized Representative:	Shen Hanna	Date: 9/1/2016

Signature of Authorized Representative:

Date: 9/1/2016



Contractor: CBI Drywall Corp

SCA School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

Address: 6360 80the Street, Middle Village

LLW: 89232 Date: Contractor Contact: Shaun Hawes

Spec Section: 09260

Telephone: (631) 491-4700

and the second se	14-14-54-7		Recycled Content		Regional*** Materials		
Product Name	Manufacturer	n Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
Paper Faced Metal Corner BeadUS	G	5	0.0%	61.0%	88.80%	<=500 miles	355 miles
						miles	miles
			2.0			miles	miles
						miles	miles
						miles	miles
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	Manufacturer Mater Labo		Recycled Content		Regional*** Materials		
Product Name		Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
Quick Frame Header	Marino/Ware	1	19.8%	14.4%	36.90%	64 miles	30 miles
-						miles	miles
						miles	miles
A CONTRACTOR OF A CONTRACTOR OFTA CONT			2			miles	miles
			2			miles	miles
						miles	miles

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SCA School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

Address: 6360 80the Street, Middle Village

Contractor Contact: Shaun Hawes

LLW: 89232 D	Date:		Spec Section:	09260	Telephone:	(631) 491-4700	
100 C			Recycled Content			Regional*** Materials	6
Product Name	Manufacturer	Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
Acoustical Sealant	USG	4	0%	6 0%	60%	<=500miles	348 miles
					1	miles	miles
				1		miles	miles
				10		miles	miles
						miles	miles
						miles	miles

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- 5 Provide back-up documentation for information on form above such as product data or manufacturer's statements.

Contractor Certification:

I, Shaun Hawes	a duly authorized representative of	CBI Drywall Corp	hereby certify that the material information
herein is an accurate	representation of the material qualifications	s provided, as components of t	he final building construction. Furthermore,
I understand that any	change in such qualifications during the p	urchasing period will require pr	or written approval from the Construction Manager and Owner.

Signature of Authorized Representative:

Date: 10/17/2016



Project: PSIS 49 Address: 63-60 80th St. Middle Village, NY 11379 LLW:

CA School Construction Authority NYC Green Schools Rating System struction Contractor 5 Contractor Contact: Spec Section: 6 -45 DC Telephone:

0.000 07700 T.S U 2			Recycled Content		Regional*** Materials			
Product Name	Manufacturer	Material Cost (no Pe Labor & Equip.) Post b		Percentage Pre- Consumer** by weight	Percentage Regionally Extracted by weight	Distance between Distance between project site and extraction site manufacture si	Distance between project site and manufacture site	
Arctic White 0/90	DALTILE	4	0.0 0/0	35.0 %	N/A	N/A miles 2183	miles	
Suntlower DH50	DALTILE	4	0.0 0/0	35.5%	NA	N/A miles 3349	miles	
Desert Grav X114	DALTILE	1	0.0 0%	35.0 0p	N/A	N/A miles 2183	miles	
Watertall 10169	DALTile		0.0 %0	35.000	NA	N/A miles 2183,	miles	
Sea Breeze Q174	DALTILE	H. 1000-00	0.0 %	35.0 %	NA	N/A miles 2574	miles	
Waterfall D169	DALTILE	\$)	0.000	8.10 00	NIA	NA miles 211	miles	

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Contractor Certification:

I, Camille Battistia duly authorized representative of Baybrent Construction hereby certify that the material information herein is an accurate representation of the material qualifications provided, as components of the final building construction. Furthermore,

I understand that any change in such qualifications during the purchasing period will require prior written approval from the Construction, Manager and Owner. 3 120

Camille Batterte Signature of Authorized Representative: Date:



Contractor: CBI Drywall Corp

SCA School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

LLW:

Address: 6360 80the Street, Middle Village

89232 Date:

Contractor Contact: Shaun Hawes

Spec Section: 09510

Telephone: (631) 491-4700

A. P. A. S	Manutacturer		Recycled Content		Regional*** Materials			
Product Name		Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site	
Mars 88785	USG	5	0.0%	75.1%	0%	>500 miles	1013 miles	
						miles	miles	
				-		miles	; miles	
						miles	i miles	
						miles	miles	
			I. II			miles	miles	

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Contractor Certification:

I, Shaun Hawes a duly authorized representative of <u>CBI Drywall Corp</u> hereby certify that the material information herein is an accurate representation of the material qualifications provided, as components of the final building construction. Furthermore, I understand that any change in such qualifications during the purchasing period will require prior written approval from the Construction Manager and Owner.

Signature of Authorized Representative:

Date: 2/2/2017



Contractor: CBI Drywall Corp

SCA School Construction Authority NYC Green Schools Rating System

Project: P.S. 49 Queens

LLW:

Address: 6360 80the Street, Middle Village

89232 Date:

Contractor Contact: Shaun Hawes

Spec Section: 09510

Telephone: (631) 491-4700

The second second	Manufacturer	Material Cost (no Labor & Equip.)	Recycled Content		Regional*** Materials			
Product Name			Percentage Post-Consumer* by weight	Percentage Pre-Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site	
Donn Brand DX Grid	USG		25.59	6,8%	0%	NA	353 miles	
			1			ondes	miles	
1		1.				miles	miles	
	1		1	N		miles	miles	
			1.			miles	milės	
			· · · · · · · · · · · · · · · · · · ·			miles	miles	

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Contractor Certification:

a duly authorized representative of CBI Drywall Corp. hereby certify that the material information I, Shaun Hawes therein is an accurate representation of the material qualifications provided, as components of the final building construction. Furthermore, I understand that any change in such qualifications during the purchasing period will require prior written approval from the Construction Manager and Owner.

Signature of Authorized Representative:

Date: 2/2/2017



NYC Green Schools Rating System Contracto:: Pyramid Flooring

Project: P.S. 49 Queens

LLW:

Address: 6360 80the Street, Middle Village

89232 Date:

Contractor Contact: Bob Bond

Spec Section: 09650 Te

Telephone:

SCA School Construction Authority

			Recycled	Content	1	Regional*** Material	s
Product Name	Manufacturer	Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site
Excelon VCT	Armstrong	For For	TBD	1%		miles	<500
Wall Base	RODOF.			10%		miles	593
Venil Oslars	hoft o					miles	miles
			·			miles	miles
						miles	miles
						miles	milės

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Contractor Certification:

Signature of Authorized Representative:

Date:

SCA School Construction Authority

NYC Green Schools Rating System

Project: PS/IS 49Q

Address: 63-60 80TH STREET, MIDDLE VILLAGE 11379

Contractor: Nu-Tech Furnishings, Inc

Spec Section: 10151

1

LLW: 89232 Date: 8/8/2016

Contractor Contact: Ernesto Vargas

Telephone: 631-923-0300

Product Name	Manufacturer	Material Cost (no Labor & Equip.)	Recycled C	Content	Regional*** Materials			
			Porcentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site	
TOILET PARTITIONS	GLOBAL PARTITIONS	4 (16.5%	0%	0%	miles	800miles	
						miles	miles	
						miles	miles	
						miles	miles	
				the second se		miles	miles	
						miles	miles	

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Contractor Certification:

 I, Ernesto Vargas
 a duly authorized representative of
 Nu-Tech Furnishings, Inc.
 hereby certify that the material information

 herein is an accurate representation of the material qualifications provided, as components of the final building construction. Furthermore,
 I understand that any change in such qualifications during the purchasing period will require prior written approval from the Construction Manager and Owner.

Signature of Authorized Representative:

Date: 8/8/2016

LLW: 89232 Date: 3/8/2016



Project: PS/IS 49Q

Address: 63-60 80TH STREET, MIDDLE VILLAGE 11379

Contractor: Nu-Tech Furnishings, Inc.

Contractor Contact: Ernesto Vargas

Spec Section: 10505

Telephone: 631-923-0300

Product Name	Manufacturer		Recycled Content		Regional*** Materials			
		Material Cost (no Labor & Equip.)	Percentage Post-Consumer* by weight	Percentage Pre- Consumer** by weight	Percentage Regionally Extracted*** by weight	Distance between project site and extraction site	Distance between project site and manufacture site	
METAL LOCKERS	ASI STORAGE SOLUTIONS	5	25,0%	0%	0%	miles	800miles	
						miles	miles	
						miles	miles	
	1 (1000-100-10-10-10-10-10-10-10-10-10-10-1	2000 LA				mites	miles	
					S 53/47	miles	miles	
				12300		miles	miles	

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Signature of Authorized Representative:

10

8/8/2016 and a set

10.10

- - -

CONTRACT	OR'S SUST	TAINAE	BLE MATERIALS - 1	FRACKING	ORM			` た			
Credit M 2.1F	R, M 2.2, M2.	3R and	M2.4					SCA) S	chool Con:	struction	Authority
								I	VYC Green Sch	ools Rating S	ystem
Project:	PS 49 Quee	ens Add	ition			Contractor:	EW Howell				
Address:	63-60 80th	St, Mido	lle Village, NY 11379		Contra	ctor Contact:	Molly Roone	у			
LLW:	89232	Date:	5/24/2018				Т	elephone:	(516) 921-71	00 ext. 125	5
Spec		Ma	torial	Vendor/Si	h-Contractor Name	Recycler	d Content	Region	al Content	Costin	formation
Section	For which r	ecveled	or regional content	venuoi/oc		Docum		Docur	mentation	oootimoimaton	
(in CSI	documer	ntation r	nust be submitted			Docum		Docui			
(in och	documen	lation				Required	Submitted	Required	Submitted	Required	Submitted
older)						(Yes/No)	(Date)	(Yes/No)	(Date)	(Yes/No)	(Date)
02200/											
025130	Earthwork,	Broken	Stone Base	Tilcon	Tilcon Y		5-Dec-2017	Yes	5-Dec-2017	Yes	7-Feb-2018
				Pioneer Lan	dscaping & Asphalt						
02512/3	Asphalt Pav	<i>l</i> ement		Paving Inc.		Yes	24-Oct-2017	Yes	24-Oct-2017	Yes	26-Jul-2017
02723	Storm Drain	nage Pi	ре	Lane		No	14-Sep-2016	No	14-Sep-2016	No	14-Sep-2016
02900	Landscape	Materia	ls	Island Tops	oil	No		Yes	24-May-2018	Yes	24-May-2018
03200	Concrete R	einforce	ement	Gerdai		Yes	23-Jun-2016	Yes	23-Jun-2016	Yes	23-Jun-2016
03300	Foundation	Concre	te	Best Concre	ete Corp	Yes	8-Mar-2016	Yes	8-Mar-2016	Yes	21-Mar-2016
03300	Cast-in-pla	ce Con	crete	Best Concre	ete Corp	Yes	8-Mar-2016	Yes	8-Mar-2016	Yes	6-Jun-2016
03300	Exterior Sla	b on Gr	ade Concrete Mix	Best Concre	ete Corp	Yes	23-Sep-2016	Yes	23-Sep-2016	Yes	23-Sep-2016
04200	Concrete m	asonry	Units	Barrasso		Yes	17-Aug-2016	Yes	17-Aug-2016	Yes	4-Oct-2016
04200	Brick			Belden		Yes	17-Aug-2016	Yes	17-Aug-2016	Yes	4-Oct-2016
04435	Cast Stone			Spec Mix		No	25-Aug-2016	Yes	25-Aug-2016	Yes	1-Jun-2017
05120	Structural S	teel		Steel Dynar	nics	Yes	16-Mar-2018	Yes	16-Mar-2018	Yes	16-Mar-2018
05300	Metal Deck			Canam		Yes	16-Mar-2018	Yes	16-Mar-2018	Yes	16-Mar-2018
05710	Steel Stairs			Nucor		Yes	16-Mar-2018	No	20-Mar-2018	Yes	16-Mar-2018
07212	Batt Insulati	ion		CBI Drywall	Corp	Yes	8-Mar-2017	Yes	8-Mar-2017	Yes	8-Mar-2017
07212	Rigid Insula	ation		Darcon Con	struction	Yes	24-Mar-2016	Yes	24-Mar-2016	Yes	24-Mar-2016
07250	Sprayed Fir	e Resis	tive Materials	lsolatek		Yes	29-Nov-2017	Yes	29-Nov-2017	Yes	7-Feb-2018
07560	Roofing Me	mbrane	2	KJC Waterp	proofing	Yes	2-Aug-2016	No	3-Oct-2016	Yes	3-Oct-2016
07560	Roofing Ins	ulation		KJC Waterp	proofing	Yes	3-Oct-2016	No	3-Oct-2016	Yes	3-Oct-2016
08110	Steel Doors	and Fr	ames	LIF Industrie	es	Yes	2-May-2018	Yes	2-May-2018	Yes	2-May-2018
08331	Rolling Stee	el Doors	3	Cookson Ro	olling Doors	Yes	29-Sep-2016	Yes	29-Sep-2016	Yes	24-Oct-2017
08521/2/4	Auminum \	Nindow	Frames	Mapes		Yes	18-Apr-2018	No	18-Apr-2018	Yes	18-Apr-2018
09260	Gypsum Wa	all Boar	d and Cement bd	CBI Drywall	Corp	Yes	20-Oct-2016	Yes	20-Oct-2016	Yes	21-Sep-2016
09260	Metal Stud I	Framing	1	CBI Drywall	Corp	Yes	20-Oct-2016	Yes	20-Oct-2016	Yes	21-Sep-2016
09310	Tile			Baybrent Co	onstruction	Yes	29-Mar-2018	Yes	29-Mar-2018	Yes	29-Mar-2018
09510	Acoustic Ce	eilings		CBI Drywall	Corp	Yes	27-Mar-2017	No	27-Mar-2017	Yes	27-Mar-2017
09620	Drywall			CBI Drywall	Corp	Yes	18-Oct-2016	Yes	18-Oct-2016	Yes	18-Oct-2016
09650	Vinyl Comp	. Tile ar	d Sheet Flooring	Pyramid Flo	oring	Yes	11-Nov-2016	No		Yes	24-Oct-2017
10151	Toilet and D	Dressin	g Rm Compartments	Nu-tech Fur	nishings Inc.	Yes	25-Aug-2016	No		Yes	25-Aug-2016
10505	Lockers			Nu-tech Fur	nishings Inc.	Yes	21-Sep-2016	No		Yes	21-Sep-2106

Note: For Tracking Form Initial Submission include any vendor/subcontractor names available and complete yes/no boxes.

Q2.1R: IAQ Plan, Labeled and dated IAQ photos, IAQ Photo Tracking Matrix.

PS 49Q

9/8/16

CONSTRUCTION INDOOR AIR QUALITY MANAGEMENT PLAN

I. Introduction

In this plan E.W. Howell has developed a Construction Indoor Air Quality (IAQ) Management Plan specific to the PS 49Q project's construction process. The plan addresses the requirements of LEED EQc3.1 and EQc3.2 Construction Indoor Air Quality Management Plan

II. LEED Requirements

The LEED requirements with which this plan complies are the following:



Develop and implement an Indoor Air Quality (IAQ) Management Plan for the construction and preoccupancy phases of the building as follows:

- During construction meet or exceed the recommended control measures of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines for Occupied Buildings Under Construction, 2007, Chapter 3, 2nd Edition.
- 2. Protect on site or installed absorptive materials from moisture damage.
- If permanently installed air handlers are used during construction, filtration media with a Minimum Efficiency Reporting Value (MERV) of 8 must be used at each return grille, as determined by ASHRAE 52 2-1999.
- 4. Replace all filtration media prior to occupancy.

EQc3.2 Construction IAQ Management Plan Before Occupancy

Develop and implement an Indoor Air Quality (IAQ) Management Plan for the preoccupancy phases of the building as follows:

- After construction ends and prior to occupancy and with all interior finishes installed, conduct a building flush out by supplying a total air volume of 14,000 cubic feet of outdoor air per square foot of floor area while maintaining an internal temperature of at least 60 degrees Fahrenheit and a relative humidity of no higher than 60%; or.
- 2. If occupancy is desired prior to completion of the flush out, the space may occupied following the delivery of a minimum of 3,500 cubic feet of outdoor air per square foot to the space. Once a space is occupied, it shall be ventilated at a minimum rate of .30 cfm/sq ft of outside air or the design minimum outdoor air rate as determined in EQp1, whichever is greater. During each day of the flush out period, ventilation shall begin a minimum of 3 hours prior to the occupancy and continue during occupancy. These conditions must be maintained until a total of 14,000 cubic feet per square foot of outside air has been delivered to the space.

The LEED Reference Guide also requires the Plan to include the following tasks:

- 1. Sequence the installation of materials to reduce the chances that porous
- materials absorb contaminants emitted by pollutant sources.
- 2. Document work undertaken in fulfillment of the plan.
- Submit documents for LEED Certification.
- Define overall coordination and communication related to the plans implementation.



PS 49Q

CONSTRUCTION INDOOR AIR QUALITY MANAGEMENT PLAN

I. OVERVIEW

The intent of this plan is to:

- 1. Minimize exposure of construction workers to air pollution.
- Prevent air pollutants from collecting in building systems and on building materials.
- 3. Prevent air pollutants caused by construction from migrating into occupied spaces
- 4. Preventing excessive moisture exposure/moisture damage

For the purpose of this plan, pollutants are defined as:

- Particulates
- Volatile Organic Compounds (VOC)
- Formaldehyde
- Combustion Emissions
- Airborne Bacteria and Micro Organisms
- Airborne Inorganic Compounds, such as ozone (from electric motors), metal fumes (from smoldering and welding) and ammonia and chlorine (from cleaning compounds).

The plan addresses all measures required by the US Green Building Council EQc3.1 and EQc3.2 (Construction Indoor Air Quality Management Plan)

II. PROJECT ORGANIZATION

PERSONNEL AND RESPONSIBILITIES

The following personnel will have primary responsibility for executing and monitoring the Construction IAQ Management Plan. Responsibilities are defined as follows:

General Contractor

- Overall responsibility and execution of the plan.
- Resolve disputes related to Plan execution and coordination.
- Appoint the IAQ Representative. Representative shall work for the General Contractor.
- Develop IAQ control measure schedule. The schedule will list the anticipated dates and expected duration of all control measures. The schedule will be updated as needed, in response to overall changes in the project schedule.

IAQ Representatives – Jack Levitsky (Site Superintendent) & Molly Rooney (Assistant Project Manager, LEED AP BD+C)

- Inform all personnel of the Construction IAQ Management Plan's goals and procedures. Provide
 opportunities for discussion and feedback to ensure that all construction personnel thoroughly
 understand the intent and procedures of the plan.
- Regularly inspect the jobsite to supervise and ensure plan compliance.
- Discuss ongoing measures to carry out the plan at project meetings and/or meetings organized to address Construction IAQ Management.
- Ensure the criteria for warnings and corrective actions due to poor or failed compliance with the
 plan, are clearly understood by all affected parties.
- Notify the project manager if, in the representative's opinion, the procedures and measures
 required to implement the plan are not being adhered to.
- Generate and/or compile all plan documentation

Subcontractors

- Carry out requirements of the plan under the direction of the representative.
- Discuss measures to carry out the plan at all meetings with the general contractor and with any
 other subcontractors performing work affected by the plan.
- Sequence work and use work methods that conform to the plan requirements.
- See attached WDF Inc.'s HVAC IAQ Plan

PS 49Q

Primary copies of the documentation will be filed at the offices of the construction manager. Upon occupancy of the building (or earlier, if requested), the owner will be provided with the following documentation package:

- The approved Construction IAQ Management Plan.
- Minutes of all meetings in which the Construction IAQ issues were discussed.
- Deficiency reports showing all corrective action taken and dates of both deficiency and corrective action.
- Copies of work orders and work order logs.
- Schedule of temporary use of the building mechanical equipment. Schedule of filter change outs showing location, time and filter type, until acceptance of the equipment by the owner.
- Cut sheets for all filtration media.
- Cuts of duct testing and cleaning reports with Merv ratings highlighted
- Job Progress Photographs: at least 18 clear progress photographs evenly divided among 10
 different occasions. Photographs will show implementation of various measures required by the
 plan, and will be labeled to indicate the measure being shown. Photographs will have integral date
 stamps and will be submitted in chronological order.
- A copy of the IAQ Control Measure schedule

REFERENCE STANDARDS

SMACNA IAQ Guidelines for Occupied Buildings Under Construction 2007, Chapter 3, 2nd Edition -Sheet Metal and Air

Conditioning National Contractors Association (SMACNA). The overall intent and detailed recommendation found in these guidelines is the basis for the plan, although the guidelines are intended for use in occupied buildings.

ANSI/ASHRAE 52.2-1999; Method of Testing General Ventilation Air Cleaning Devices for Removal Efficiency of Particle Size. These define the testing to establish the MERV rating for filters.

General Specification for the Cleaning of HVAC Systems, National Air Duct Cleaning Association 1997; www.nadca.com.

III. CONTROL MEASURES

HVAC EQUIPMENT AND DUCTWORK

HVAC Equipment and ductwork will be protected from dust and other pollutants via the following procedures:

Sealing Ductwork and Air Handling Equipment

- Openings into installed ductwork and air-handling equipment not in active use will be sealed using taped plastic, taped cardboard, or other reasonably air-tight coverings.
 Sealing will occur prior to, or immediately upon installation of the ductwork or equipment.
 Regular walk-throughs will be conducted by the IAQ Representative to check for damaged or displaced coverings. Repair or replacement of damaged or displaced coverings will occur immediately upon discovery, at the direction of the IAQ Representative. Tomco Mechanical is responsible for all HVAC protection measures.
- Construction work that generates air pollution will be avoided where ductwork or airhandling equipment is being installed. If visible air pollutants are present in a space where ductwork is to be installed, spot cleaning or other measures will be used to prevent ductwork or equipment contamination.

Use of Mechanical Systems During Construction For Temporary Heat

The use of mechanical systems during construction is subject to the following control and protection measures if used during construction:

- Exhaust and makeup air supply systems; when a system is operated during construction, its filters will be replaced upon completion.
- <u>Central air systems</u> will be subject to these provisions when operated during construction:
- The central AHU will be protected with a temporary filter having a minimum rating of MERV 8 per ASHRAE 52.2-1999.
- Distribution elements needing filters, including all return air ductwork, will be protected with temporary filters having a minimum rating of MERV 8 per ASHRAE 52.2 1999 unless otherwise noted below.
- Filters will be periodically inspected and replaced if dirty.
- All components of the distribution on the return side will be protected, including but not limited to:
 - The portion of the air handler upstream of the central
 - fan: o Return vents, ducts and shafts;
 - VAV box intakes; and o Transfer ducts.

 Components of the distribution system on the supply side will typically not need protection except:

- If portions of the supply system become contaminated, coarse filters will be applied to completely cover supply outlets, to prevent the distribution of particulates into
 - building spaces.

Filter Replacement and Tracking

- MERV 8 filters used for ductwork protection will be replaced on an as-needed basis, as determined by the IAQ Representative.
- Prior to flush-out, the MERV 8 filters used for ductwork protection will be discarded. New (Merv 13) filters will be installed at all air handlers prior to flushout.
- A cut sheet for each type of temporary filter and air handling supplemental equipment (i.e. fan coil units, fan power boxes, van boxes, etc.) used will be filed and included in the final submittal.
- A schedule of filter replacements (showing location, time, and filter type) will be recorded and included in the final Plan documentation. Submittal documentation will be provided for information on filtration media prior to installation as IAQ protection during construction.

Duct Cleaning

Duct cleaning will be considered a last resort measure in the event of a failure of other measures. If duct cleaning is needed:

- The work will be done by experienced professionals skilled in the task, using specialized equipment and following the requirements of the General Specifications for the Cleaning of HVAC Systems referenced above.
- If it is found that duct liner, ductwork, or equipment is too contaminated to be cleaned successfully, it will be replaced at no cost to the Owner.
- If construction is still underway at the completion of cleaning, all openings required to be sealed per this Plan will be resealed as soon as possible after cleaning.
- A log recording all duct cleaning that takes place during construction will be created, filed, and included in the final submittal.
The party creating the pollution will bear the cost of cleaning, if the polluting work was done in violation of the Plan and if the party was properly informed before the violation per the provisions of this Plan.

SOURCE CONTROL

This Plan is predicated on the use of low-emission interior products which comply with the following VOC limit standards and have been reviewed and approved by the Owner's Design Team:

- Adhesives: California Quality Management District (SCAQMD) Rule #1168 (effective July 1, 2005 and rule amendment date of January 7, 2005). [LEED Credit EQ-4.1]
- Sealants: South Coast Air Quality Management District Rule #1168, Organic Compounds: Adhesive and sealant products [LEED Credit EQ-4.1]
- Architectural paints, coatings, and primers applied to interior walls and ceilings: Green Seal Standard GS-11, Paints, First Edition, May 20, 1993. [LEED Credit EQ-4.2]
- Anti-corrosive and Anti-rust paints applied to interior ferrous metal substrates: Green Seal Standard GC-03, Anti-Corrosive Paints, Second Edition, January 7, 1997. [LEED Credit EQ-4.2]
- Clear wood finishes, floor coverings, stains, sealers, and shellacs applied to interior elements: California's South Coast Air Quality Management District (SCAQMD) Rule 1113, Architectural Coatings, rules in effect January 1, 2004. [LEED Credit EQ-4.2]
- Carpet, carpet cushion, and carpet adhesives: Carpet and Rug Institute's (CRI) Green Label Plus
 program. [LEED Credit EQ-4.3]
- Composite wood, agrifiber products, and laminating adhesives: Urea formaldehyde-free [LEED Credit EQ-4.3]
- Smoking is strictly prohibited inside the building.

Modifying Equipment Operation

To reduce air pollution during construction:

- · Electric equipment will be used instead of gasoline-powered equipment whenever practical.
- Bottled gas will be used in place of diesel fuel whenever practical.
- Exhaust from gasoline or diesel vehicles will be kept away from air intake pathways.
- Fuel-burning equipment will be cycled off during extended periods between uses.

Changing Work Practices

All construction workers will use work practices that reduce the generation and distribution of indoor air pollutants. The individual contractor IAQ Representatives will conduct orientation sessions with affected construction workers and supervisors. In these sessions, the IAQ Representative will review goals covering all aspects of the Plan, including HVAC protection, source control, pathway interruption, use of low-VOC products, housekeeping, and flushout.

Local Temporary Exhaust

Where available; operable vents and windows will be opened to ventilate the building during application of interior finishes when weather conditions are suitable. Spaces with fixed glazing or no windows will be ventilated by localized temporary exhaust, as described below or by using building mechanical systems (described above).

- Any local regulations concerning the discharge of particulates will be adhered to.
- Local temporary exhaust will be accomplished using fans, duct extensions, and filters.
- Local temporary exhaust will not discharge near air intakes or other openings that lead into the building.
- When necessary to control odors, special filtration media such as potassium permanganate or activated charcoal will be used.

Building louvers may be temporarily removed, or the installation of fixed windows delayed for the
placement of exhaust ductwork.

Covering or Sealing Sources of Pollution

The following rules apply to materials that emit air pollutants or odors:

- Containers containing wet materials will be covered whenever they are not in active use.
- Waste material will be covered or sealed and regularly removed from the building.
- Absorptive materials or materials with an odor will be covered while moved through the building.
- · Whenever possible, material containers will be disposed of with the covers on.
- Enclosed tankers will be used for built-up roofing instead of open kettles.
 Materials that require a
 surface coating to control pollutants or odors will be coated promptly.

PATHWAY INTERRUPTION

Measures will be implemented to close or cover pathways between spaces though which pollutants could travel.

Controlling Pollution at Entrances

Measures will be taken to prevent pollutants from being tracked into interior spaces by workers or equipment. To be swept clean using green dust as needed.

Protection of Stored Materials

Measures will be taken to minimize dust accumulation on material surfaces and the absorption of other pollutants by absorbent materials. The measures will include the following:

- Materials will be handled and stored according to the manufacturer's recommendation.
- Unwrapped absorbent materials will be shrink-wrapped if necessary and as indicated below.
- Highly absorbent materials like duct liner, acoustic tile, carpeting, or insulation will be stored indoors in the original packaging, or covered and sealed.
- Moderately porous materials like gypsum board will be stored indoors, wrapped or away from dust and materials prone to off-gas VOC's.
- Framing lumber will be stored indoors whenever possible. If stored outdoors, the lumber will be (1) covered with a water proof covering, (2) stored off the ground, and (3) located away from standing water.
- Dense material like glass, metal framing, ductwork and equipment will be covered and kept dry.
- If condensation forms on cold material, care will be taken not to expose it to dust or other particles. If
 exposed to pollution, housekeeping measures will be used promptly to clean the material before
 installation.

Protection of Materials During and After Installation

- No materials intended for dry installation will be installed wet.
- No materials will be stored in rooms containing air-handling equipment, other than materials intended for use there.
- The Representative will determine the appropriate measures to prevent water damage to materials not intended to be wet during construction, including temporary water barriers and/or water stops.
- Subcontractors are required to notify the IAQ Representative of any condition in which a material may be moisture damaged. The IAQ Representative will inspect the material and determine if it needs to be replaced.
- Subcontractors who apply finishes without notifying the IAQ Representative of underlying water damage will be financially responsible for the cost of removing and replacing all affected materials, and of related work, including investigating for mold spores.

Preventing Contamination of Completed Areas from Work under Construction

When work is completed in an area, the area will be protected from pollutants generated in other parts of the building still under construction. One or more of the following methods of pathway interruption will be used:

Erecting barriers between completed areas and areas still under construction

Where present, doors and windows will be closed and locked between completed portions of the building and portions of the building still under construction. The closures will be further sealed with tape, plastic sheeting and/or sealant, if necessary.

Where there is no constructed barrier between the two portions of the building, a temporary barrier will be erected close in the small of the two spaces. The edge of the temporary barrier will be taped continuously to ensure a tight seal, or even caulked. The temporary barrier will be erected to withstand pressure differentials between the two spaces. Elevator and stairways that open on to both completed areas and areas still under construction will have air lock vestibules at their entries to the floor to prevent the passage of dust and other contaminates by the stack affect.

HOUSEKEEPING

The following housekeeping measures will be employed as part of the Plan:

- A regular housekeeping schedule will be instituted. Cleaning measures and frequency will be selected according to the pollutants generated in a space.
- Where applicable, dust will be suppressed by the use of low-odor wetting agents and sweeping compounds.
- Low-odor cleaning agents will be used.
- Spills of water or solvent will be cleaned up immediately.
- Attention will be given to cleaning hidden or hard-to-reach surfaces, such as wall cavities, tops of door, ledges, and behind water closets.
- Standing water will not be allowed
- Un-vented combustion use is prohibited.

SEQUENCING FINISH APPLICATIONS

The installation and application of finishes will be scheduled to prevent porous materials from acting as "sinks" for the storage and subsequent release of contaminants emitted from wet-applied finishes and other high off-gassing materials.

PROCEDURES

The following sequencing procedures will be coordinated by the Representative:

Only low-VOC adhesives will be used for carpet installation.

- Caulks, sealants, and joint fillers will be applied prior to installing carpets or acoustical ceiling tiles. Painting
 of interior walls, soffits, doors, frames, etc. (with the exception of touch-up work) will occur prior to installing
 carpets or acoustical ceiling tiles.
- Only low-VOC paints and primers will be used.
- Where feasible, a primer coat of paint will be applied to gypsum wallboard prior to the application of caulks, sealants, and joint fillers.
- Custom architectural millwork items will be finished off-site and delivered to the site after a minimum 48 hour curing period.
- Fabric-covered systems furniture panels and upholstered furniture will be installed after all other finish work is complete, and after flush-out is complete.

Proper curing of concrete before covering: Applicable finishes over concrete will be installed according to
manufacturer's instructions regarding the appropriate condition of the slab.

BUILDING FLUSH-OUT

The following procedures address the requirements of LEED Credit EQ-3.2: Construction IAQ Management Plan Before Occupancy.

FLUSH-OUT

 After completing and cleaning the building, all mechanical systems that supply outside air will supply a total air volume of [14,000 cubic feet] of outdoor air per square foot of floor area while maintaining an internal temperature of at least 60 degrees Fahrenheit and a relative humidity no higher than 60%.

DR-

- After completing and cleaning sections of the building to be occupied prior to the flush-out, all mechanical
 systems that supply outside air to the completed section will supply a minimum of 3,500 cubic feet of
 outdoor air per square foot of the floor area space. The occupied space will be ventilated at [a minimum rate
 of 0.30 cfm/sq.ft. of outside air or the design minimum outside air rate determined in EQ Prerequisite
 1, whichever is greater.]
- Ventilation of the occupied spaces will begin [a minimum of 3 hours] prior to occupancy and continue for the duration of occupancy. Flush-out will continue until a total of [14,000 cu. ft./sq. ft.] of outside air has been delivered to the space.]
- Filters at central air handling units (AHU's) that are operated during flush out:

 Prior to use, each AHU
 will be equipped with filters having a minimum rating of MERV 8 or design MERV rating, whichever is greater. per ASHRAE 52.2-1999 (AHU's that have been operated during construction will already be so equipped per the above section "Use of Mechanical Systems during Construction").
- After flush-out, filters in those AHU's that supplied and exhausted 100% outside air will be inspected. If a
 significant accumulation of particulates has occurred, these filters will be replaced.
- When a completed section of the building is flushed out while construction continues elsewhere, it will be
 effectively separated from on-going construction-generated pollution in accordance with the requirements of
 "Pathway Interruption," above.
- Care will be taken to prevent pollution generated by construction dust, particulates or volatile chemicals from entering outside air intakes during flush-out.



CONSTRUCTION INDOOR AIR QUALITY PLAN

Objective

The Construction Indoor Air Quality (IAQ) Plan is intended to meet the recommended approaches of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guideline for Occupied buildings under Construction, 2007, Chapter 3. 2nd Edition.

Plan Summary

Construction generates dirt, dust, debris and releases particulates, gasses and Volatile Organic. Compounds (VOC) into the air. The protection of air quality during construction mitigates concerns relative to the well-being of workers during the project and is important for the future air quality of later occupants of the building.

An IAQ Plan, combined with proactive communication and education, can successfully control pollutant levels and maintain occupant health and comfort during and after construction

Utilizing IAQ best practices during construction greatly reduces the amount of airborne dust and construction debris, protects finished work from exposure to dust and debris, and prevents air handling systems from distributing dust and debris throughout the building. This will contribute to the quality of the building construction and the overall quality of the interior environment of the building when in operation.

Plan Outline

Items and activities specifically identified to be a part of this plan include:

- HVAC Equipment and material protection
- Source control,
- · Pathway interruption,
- Housekeeping
- · Scheduling.

In an effort to ensure that all participants in the construction process are aware of the IAQ procedures and understand the importance of the goals of the IAQ Plan, these constructionrelated IAQ procedures will be included in the pre-construction and construction progress meeting agendas

HVAC Unit Protection

- While a key role of the equipment is to ensure healthy indoor air, the system can itself become a problem if adequate care is not taken during construction. Construction employees are to keep all supply, return and exhaust ductwork clean and free from dirt, mold and air-borne contamination during construction. On site protection procedures shall consist of the following:
 - a. Clean, dry storage. All ventilation ductwork stored on-site will be stored in a clean.

dry location on raised pallets or platforms to prevent contact with slab and contaminants. All equipment openings will be covered with construction plastic to prevent infiltration of dust, moisture, or other contaminants.

- b. Seal all inlets and outlets during installation. All installed ductwork will have free, open ends or other openings taped and sealed with plastic cleanly without damage or residue on the ducts. All ductwork will remain dormant during construction until all equipment is installed, the final connection is made, and the units are tested. Or, for ducting runs that require several days to install, seal off sections as they are completed, then remove those seals prior to continuing the ducting run. If the system must be operated to maintain service to other occupied portions of the building o to protect finished work to be sure to protect the return/negative pressure side of the system. For a ceiling plenum all tiles should be in place.
- c. Temporary ventilation during construction. If required, (with change order) The contractor will avoid using the building system altogether during construction and rely on temporary ventilation system that introduces outside air and ventilates contaminated air directly, e.g. window-mounted fan units.
- d. Temporary filtration. If the system is to be used while construction is being done, install temporary filtration media on all air intakes. The filtration media with a minimum efficiency reporting value (merv) of 8 must be used at each return air grille, as determined be ASHRA 52,-1999/

Source Control

- a. Protect against moisture. All materials subject to moisture absorption, e.g. drywall, insulation, wood; etc will be stored off the slab in a covered, dry, wellventilated area to prevent exposure to foreign matter.
- b. Avoid use of moisture-damaged materials. Materials showing visible damage, moisture, or other contamination will be discarded under properwaste removal guidelines or dried thoroughly before installation. Sequence the installation materials to avoid contamination of absorptive materials such as insulation, carpeting, ceiling tile, gypsum wallboard.
- c. Ensure that construction detailing will not result in moisture introduction. Architect and contractor should be alert for design flaws that will result in water entry into the building, e.g., leakage at roof inspection, poor rain screen details, etc.
- d. Use low-emitting products. VOC limits will be maintained via submission of manufacturer's specifications on project materials prior to their introduction to the site. Use low emission or emission free equipment where possible, and do not idle any vehicles or equipment unnecessarily.
- e. Local exhaust. Where possible, use portable equipment to exhaust emissions to the outdoors. Filtration may be necessary. Comply with applicable regulations and direct exhaust away from any air intakes. Where exhaust is not possible, a portable air cleaner may be effective.

Pathway Interruption

- During construction, Tomco Mechanical Corp. (Tomco) will isolate areas of work to
 prevent contamination of clean or occupied spaces. When possible WDF Inc. will use
 100% outside air ventilation (depending on climate) with air exhausted directly to the
 outside during installation of finishes and other VOC emitting materials and performance
 of activities that generate dust or odor. Where possible, Tomco will request for barriers
 to be erected by non-Tomco carpenters such as dust curtains or plastic sheets between
 work areas to prevent unwanted air flow from dirty to clean areas. Where needed,
 Tomco will include temporary walk-off mats and floor protection.
- During dust emitting work, Tomco will run provided fans continuously using the maximum amount of outside air possible during installation of materials and finishes,
- Measures should be taken to minimize dust accumulation on material surfaces and the absorption of other pollutants by absorbent materials. Tomco measures will include the following:
 - a. Seal off work areas from finished areas to prevent contamination. This may include, but is not limited to, erecting temporary plastic barriers around doorways. All project equipment and material staging areas will be located away from critical air flow pathways. Mechanical rooms and air handling equipment area will not be used as storage space for construction materials and waste.
 - b. Avoid tracking pollutants into the work area. Control access to the construction site to minimize the transfer of possible contaminants from on work area to another area. Provide rough tack off grates or matting at the entryways to remove moisture and contaminants from workers shoes.
 - c. Ventilate. Depending on the weather conditions, ventilate using 100% outside air to exhaust contaminated air directly to the outside during installation of VOCemitting materials.
 - d. Pressurization. The more finished areas should be protected from the work areas by using air barrier of pressure differential to isolate areas at different stages of completion. Where necessary and possible, such protection will be achieved with high pressure ventilation in the work areas.
 - e. Seal opening. All transfer ducts, pipe chases and other openings that span the area between the finished areas and the work areas should be temporarily sealed by taping plastic sheeting over such openings and sealing the edges with tape.

Housekeeping

Where applicable the following housekeeping measures will be employed as part of the Tomco IAQ plan:

- a. Minimize. Use construction practices to minimize accumulation of dust and other contaminants on site, e.g. using dust collection bags with powertools.
- b Confine. Centralize indoor cutting or other dust generating activities to contain and control the clean-up area
- Suppress. Use wetting agents or sweeping compounds (non-toxic) to keep dust from becoming airborne
- d. Clean-up Use wet clean up and vacuums with HEPA filters to clean up dust. Clean daily or as often as possible to prevent dust migration on the site. Use Green SeaIGS-37 Cleaners or equal.
- Spills. Any water or other liquid spill should be cleaned upon occurrence to prevent damage or evaporation.
- f. Keep work area dry. Prevent spills and clean all water on-site, keep site as dry as possible. Minimize outside moisture or rain penetration through each stage of construction. When sealed to outside moisture, dehumidity site if humidity goes above 50%.
- g. Cover. Seal containers of volatile liquids while not in use and store off sitewhere possible.
- h. Storage. Do not store construction materials in finished spaces.
- Hazardous material. Follow applicable guidelines and regulations when hazardous materials are involved.

Scheduling

WDF Inc. and Airtech understands importance of scheduling work activities with high pollution potential during off hours and where applicable will plan its schedule as required.

- Tomco HVAC work activities will be sequenced to minimize absorption of contaminants.
- Tomco Site Supervisor will determine whether work area requires adequate airing out of dust materials and request and/or move equipment to the location when necessary.
- 3 Time allowance will be given for any material or equipment to be delivered to the site that would ensure safe work environment.
- WDF/Airtech will abide by the written schedule provided by the GC involving installation of porous materials, installation of finis materials, curing time and off gassing.

Building Flushout

Tomco will work with EWH and other contractors to assist with building flushout to demonstrate that maximum allowable concentrations of contaminants are not exceeded.

Reporting

Tornco Project Manager and Site Supervisor will adhere to the Indoor Air Quality Management plan as set by the GC throughout the construction period. At the end of the construction period, Tomco's Project Manager and Site Supervisor will have the following documents:

- 1. Copy of Construction IAQ Management Plan.
- Meeting minutes, checklists, worksheets, notifications and deficiency or resolution.
- 3. Logs related to IAQ issues
- Progress photographs during documenting of IAQ measures implemented during construction
- 5. Documentation and log of air inspection, testing and cleaning, where necessary

Execution

Project Manager of Tomco: Anthony Martinelli 516 425-2149 Site Supervisor of Tomco:

Equipr	nent and material	protection		
Action	Who	When	Completed	
Inspect and determine what equipment and				
material needs to be protected from dust				
Cover any equipment and material with				
tarps or plastic to prevent dust or moisture				
infiltration				
Inspect equipment and material to insure				
they are tight and sealed				
	Source Contro			
Action	Who	When	Completed	
Conduct IAQ meeting to review IAQ goals				
Open operable vents and windows to ventilate	3			
a work site				
Set up local temporary exhaust				
Set up special filtration media to control				
odors				
	Pathway Interrupt	ion		
Action	Who	When	Completed	
Erect dust curtains or plastic sheets				
Set up provided fans to run the outside air				
Store materials according to the manufacturer	's			
Recommendations (shrink-wrap, seal and/or con	/er)		0	
	Housekeepir	ng		
Action	Who	When	Completed	
Remove/Sort waste materials, rubbish, recyc	lables,		0. 20. 5	
nd other debris resulting from work				
	Scheduling	P4		
Action	Who	When	Completed	
Inspect and determine whether work area	10.0			
equires adequate airing out of dust				
Move fan and exhaust equipment to the				
cation				
	Building Elush	out		
Action	Who	When	Consideration	
	- Million	AADEDI	completed	
Assist FWH with building flushout			and the second sec	
Assist EWH with building flushout	Descal			
Assist EVVH with building flushout	Reporting		27.274	
Assist EVVH with building flushout	Reporting Who	When	Completed	

GREEN SCHOOLS GUIDE Q2.1 IAQ PHOTO TRACKING MATRIX													
PROJECT NAME: P.S. 49 Queens Addition				Date:	10/23/2017								
CONTRACTOR: EW Howell													
Contractor to review listing of SMACNA control measures and revise covering no less than 3 dates. Submitted photographs to be date-s as wide a variety of images as possible.	as applicable to tamped and lab	o project. Provid eld with SMACN	le a minimum oj IA measure bein	f 6 photos over g highlighted. I	a period Please provide								
SMACNA Chapter 3 Control Measures													
Date of photos:	10/27/2016	11/28/2016	12/7/2016	1/24/2017	2/22/217	3/17/2017	4/26/2017	5/12/2017	6/3/2017	2/2/2017	2/28/2017	3/29/2017	4/27/2017
3.2 HVAC EQUIPMENT AND DUCTWORK													
Sealing Ductwork and Air Handling Equipment	х	х	х	х	х	х	х	х	х				
Filter Replacement and Tracking													
Use of Mechanical Systems during Construction													
Duct and HVAC Equipment Cleaning													
3.3 SOURCE CONTROL													
Product Substitutions													
Low-Emission Products / Product Substitution													
Changing Work Practices													
Temporary Exhaust and Ventilation							х	x					
Sealing Pollution Sources													
3.4 PATHWAY INTERRUPTION													
Depressurize the Work Area													
Pressurize Occupied Space													
Erect Barriers to Contain Construction Area										х	х	х	х
Relocate Pollutant Sources													
3.5 HOUSEKEEPING													
Routine Jobsite Cleaning					х			х					
Protection of Stored Materials before Installation	х	х	х	х		х	х		х				
Protection of Materials During and After Installation						х	х	х					
3.6 SCHEDULING													
Airing-out of New Materials													
Sequencing of Finish Applications													
Proper Curing of Concrete before Covering													
Installation during Unoccupied Periods													





PS 49 63-60 80th Street Middle Village, NY 11379 LEED Version: SCA Green Schools Guide v2009 Requested IAQ Report

Attached please find photos highlighting the IAQ Management Plan practices for PS 49. As per your request, the attached photos include one (1) additional measure to demonstrate a total of six (6) IAQ measures.

- 1. Barriers to contain construction area dated February 2, 2017
- 2. Barriers to contain construction area dated February 28, 2017
- 3. Barriers to contain construction area dated March 29, 2017
- 4. Barriers to contain construction area dated April 27, 2017

Please note that this will serve as the final IAQ Report, as all construction has been completed.

Molly Rooney

Molly Rooney, E.W. Howell Assistant Project Manager, LEED AP BD+C

10/20/2017 Date:



MG_5469-February 02, 2017 12:25:29 PS/IS 49(Q) 63-60 80th Street, Middle Village, NY-Image facing South-East Contract #3-15-13-LS-05 - Photo by Clifford Mason for E.W. Howell, Inc. General view from Juniper Blvd & 79th St



_MG_6488-February 28, 2017 11:40:41 PS/IS 49(Q) 63-60 80th Street, Middle Village, NY-Image facing South-East Contract #3-15-13-LS-05 - Photo by Clifford Mason for E.W. Howell, Inc. General view from Juniper Blvd & 79th St



_MG_7425-March 29, 2017 13:17:32 PS/IS 49(Q) 63-60 80th Street, Middle Village, NY-Image facing South-East Contract #3-15-13-LS-05 - Photo by Clifford Mason for E.W. Howell, Inc. General view from Juniper Blvd and 79th Street



_MG_8403-April 27, 2017 12:06:05 PS/IS 49(Q) 63-60 80th Street, Middle Village, NY-Image facing South-East Contract #3-15-13-LS-05 - Photo by Clifford Mason for E.W. Howell, Inc. General view taken from Juniper Blvd & 79th St - Scaffold removed



PS 49 63-60 80th Street Middle Village, NY 11379 LEED Version: SCA Green Schools Guide v2009 Monthly IAQ Report for JUNE 2017



Attached please find photos highlighting the IAQ Management Plan practices for PS 49. The following six (6) photos include:

- Uninstalled duct having all opening sealed to prevent water, moisture, dust, and other contamination
- 2. Uninstalled duct stored on pallets away from work areas
- Installed duct with open connections sealed when no work is being performed on the specific duct
- 4. Temporary ventilation work areas
- 5. IAQ monitored daily

Molly Kooney

Date: 07/12/2017

Molly Rooney, E.W. Howell Assistant Project Manager, LEED AP BD+C

















PS 49 63-60 80th Street Middle Village, NY 11379 LEED Version: SCA Green Schools Guide v2009 Monthly IAQ Report for MAY 2017

Attached please find photos highlighting the IAQ Management Plan practices for PS 49. The following six (6) photos include:

- Uninstalled duct having all opening sealed to prevent water, moisture, dust, and other contamination
- 2. Uninstalled duct stored on pallets away from work areas
- Installed duct with open connections sealed when no work is being performed on the specific duct
- 4. Temporary ventilation work areas
- 5. IAQ monitored daily

Mollu coned

Molly Rooney, E.W. Howell Assistant Project Manager, LEED AP BD+C

Date:

6/12/2017

















PS 49 63-60 80th Street Middle Village, NY 11379 LEED Version: SCA Green Schools Guide v2009 Monthly IAQ Report for **APRIL 2017**

Attached please find photos highlighting the IAQ Management Plan practices for PS 49. The following six (6) photos include:

- Uninstalled duct having all opening sealed to prevent water, moisture, dust, and other contamination
- 2. Uninstalled duct stored on pallets away from work areas
- Installed duct with open connections sealed when no work is being performed on the specific duct
- 4. Temporary ventilation work areas
- 5. IAQ monitored daily

Molly Rooney

Date: 05/10/2017

Molly Rooney, E.W. Howell Assistant Project Manager, LEED AP BD+C
















PS 49 63-60 80th Street Middle Village, NY 11379 LEED Version: SCA Green Schools Guide v2009 Monthly IAQ Report for MARCH 2017

Attached please find photos highlighting the IAQ Management Plan practices for PS 49. The following six (6) photos include:

- Uninstalled duct having all opening sealed to prevent water, moisture, dust, and other contamination
- 2. Uninstalled duct stored on pallets away from work areas
- Installed duct with open connections sealed when no work is being performed on the specific duct
- 4. Temporary ventilation work areas
- 5. IAQ monitored daily

Molly Rooney

Date: 4/7/2017

















PS 49 63-60 80th Street Middle Village, NY 11379 LEED Version: SCA Green Schools Guide v2009 Monthly IAQ Report for FEBRUARY 2017

Attached please find photos highlighting the IAQ Management Plan practices for PS 49. The following six (6) photos include:

- Uninstalled duct having all opening sealed to prevent water, moisture, dust, and other contamination
- 2. Uninstalled duct stored on pallets away from work areas
- Installed duct with open connections sealed when no work is being performed on the specific duct
- 4. Temporary ventilation work areas
- 5. IAQ monitored daily

Molly Rooney

Date: 3/3/2017

















PS 49 63-60 80th Street Middle Village, NY 11379 LEED Version: SCA Green Schools Guide v2009 Monthly IAQ Report for **JANUARY 2017**

Attached please find photos highlighting the IAQ Management Plan practices for PS 49. The following six (6) photos include:

- Uninstalled duct having all opening sealed to prevent water, moisture, dust, and other contamination
- 2. Uninstalled duct stored on pallets away from work areas
- Installed duct with open connections sealed when no work is being performed on the specific duct
 - 4. Temporary ventilation work areas
 - 5. IAQ monitored daily

Molly Rooney

Date: 2/1/2017

















PS 49 63-60 80th Street Middle Village, NY 11379 LEED Version: SCA Green Schools Guide v2009 Monthly IAQ Report for DECEMBER 2016

Attached please find photos highlighting the IAQ Management Plan practices for PS 49. The following six (6) photos include:

- Uninstalled duct having all opening sealed to prevent water, moisture, dust, and other contamination
- 2. Uninstalled duct stored on pallets away from work areas
 - Installed duct with open connections sealed when no work is being performed on the specific duct
 - 4. Temporary ventilation work areas
 - 5. IAQ monitored daily

Molly Rooney

Date: 01/03/2017

















PS 49 63-60 80th Street Middle Village, NY 11379 LEED Version: SCA Green Schools Guide v2009 Monthly IAQ Report for NOVEMBER 2016

Attached please find photos highlighting the IAQ Management Plan practices for PS 49. The following six (6) photos include:

- Uninstalled duct having all opening sealed to prevent water, moisture, dust, and other contamination
- 2. Uninstalled duct stored on pallets away from work areas
- Installed duct with open connections sealed when no work is being performed on the specific duct
- 4. Temporary ventilation work areas
- 5. IAQ monitored daily

Molly Rooney

Date:

12/01/2016

Joe Petito, E.W. Howell Project Manager

















PS 49Q 63-60 80th Street Middle Village, NY 11379 LEED Version: SCA Green Schools Guide v2009 Monthly IAQ Report for OCTOBER 2016

Attached please find photos highlighting the IAQ Management Plan practices for PS 49. The

following six (6) photos include:

- Uninstalled duct having all opening sealed to prevent water, moisture, dust, and other contamination
- 2. Uninstalled duct stored on pallets away from work areas
- Installed duct with open connections sealed when no work is being performed on the specific duct
- 4. Temporary ventilation work areas
- 5. IAQ monitored daily

Molly Rooney

Date: 11/14/16

Molly Rooney, E.W. Howell Assistant Project Manager












Q2.2R: Flush-out procedures description, flush-out calculations, and flush-out letter

TOMCO MECHANICAL CORP.

125 State Street, Westbury, New York 11590 (516) 546-5700 / FAX (516) 546-7521

P.S. 49 - Middle Village

EW Howell Project: #03-15-13

Submittal Date: 09/22/16

Revision Date: 04/17/17

Contractor: E.W. Howell Co., LLC

Subcontractor: Tomco Mechanical Corp.

Supplier: TOMCO MECHANICAL CORP.

Manufacturer:

Preparer: Tomco Mechanical Corp.

Drawing No .:

Specification No.:15992-001-002

Sect./Div. No.: Sect. 15 - Div.15992

Paragraph No.: All Paragraphs within given sections

Title: 15992 – Cleaning & Testing – Flushout Procedure and Calculation (IAQ)

TOMCO MECHANICAL CORPORATION 125 STATE STREET WESTBURY, NEW YORK 11590 (516) 546-5700 (Tel.) (516) 546-7521 (Fax)

FLUSH-OUT PROCEDURE AND CALCULATION FOR PS-49

September 22, 2016

PS-49 63-60 80th Street Middle Village, New York 11379

PROCEDURE

- · Set all roof top and exhaust fans units for 100% outside air
- · Maintain air temperature to specified design
- RH to be no higher than 60%
- Set BMS system to show start time, operating hours, temperature, RH and volume of outside air on roof top unit <u>#1</u>.
- Testing will start on 8/1/17 and run for <u>21</u> days continuously

CALCULATION

- Based on SCA Specifications 14,000 C.F.M. Flush out required per square foot.
- This is a calculation for the flush-out at <u>PS-49Q</u>.
- Total area of new building is approx. <u>25,885 Sq. Ft.</u>
- The total flush-out requirement for the building is <u>14,000 cu. ft.</u> of outdoor air x sq. ft.
- The total capacity of all rooftop units exhaust fans is <u>12,000</u> C.F.M. at 100% outside air intake

See below for Flush-Out Calculation

Total Building Sq. Ft.	SCA Required Cu Ft x Sq Ft	Total Cu Ft To be Purged	(<u>1)</u> RTU Employed to Exhaust	(Min x Hrs) 60 x 24	Total Cu Ft Exhausted Per Day
25,885	X 14,000	= <u>362,390,000</u>	CFM <u>12,000</u>	X 1,440 minutes	17,280,000

Total Cu. Ft. Flushout Required		Flushout X Day		Required Flushout Days
362,390,000	:	17,280,000	=	21 Days

SPEC. SECTION S01550

- Prior to Occupancy: Flush-out after construction ends with all interior finishes installed. Perform building flush-out by supplying a total air volume of 14,000 cu. Ft. outdoor air per square foot or floor area while maintaining an internal temperature of at least 60/75 degrees F. and RH no higher than 60%.
- Before Occupancy install Merv 13 filters at each return air grill, replace as necessary, temporarily "seal" building from construction emissions and contaminants, keep dust to a minimum, and clean frequently, keep area clean and dry. All volatile liquids should be kept out of the building. Perform before occupancy flush-out by supplying a total of 14,000 cu. Ft. of outdoor air (100% fresh air) per square foot while maintaining an internal temperature of at least 60/75 degrees F. and RH no higher than 60%.

Anthony Martinel President

<u>04/17/17</u> Date



MECHANICAL CORPORATION

COMMERCIAL-INDUSTRIAL-REFRIGERATION-H.V.A.C.

125 STATE STREET, WESTBURY, NEW YORK 11590 TELEPHONE (516) 546-5700 FAX (516) 546-7521

June 26, 2018

This is to attest that Tomco Mechanical Corp. has completed the flush-out at P.S. 49 that started on August 1, 2017 and ran for 21 continuous days.

Anthony Martinelli –President

6/26/18

Date

APPENDIX B

Project Certification Forms <u>Design Team Certification Form, Construction Phase.</u> SCA GSG committee indicated, in 22Jun2018 meeting minutes that form is acceptable.



School Construction Authority NYC Green Schools Rating System

Architect	Firm Name:	Architect: John Ciantullo Associates, P.C.	Date:	5/18/2016
	Address.	575 Eighth Avenue, 20th Floor	Project Name:	P.S. 49 Queens Addition
		New York, NY 10018	Project Address:	63-60 80th St (btw Juniper Blvd S & Penelope)
	Telephone	212-245-0010		Middle Village, NY 11379
	email:	cheaphy@ciardullo.com	5	
			LLW #	089232
			Design #:	
Engineer	Firm Name:	DVL Consulting Engineers inc.	BCC #	
	Address:	375 Main Street	Design Manager:	Clara Rogers
		Hackensack, NJ 97601	Gonstr Specialist	
	Telephone:	201-676-2224 ×118	BCC Reviewer:	
	emai:	akats@dvlengineers.com	Commissioning:	EME Group

Architeci's Staisment - Construction Phase:

As Architect of Record, I verify that the statements initiated by me on the following pages are accurate to the best of my knowledge.

Narratives for all credits have been provided and updated as necessary with the final design submission.

Colcutations have been provided, according to the credit requirements, and updated as necessary with the final design submission.

John Ciardullo Name

President Title

5/21/18 Signal

Engineer's Statement - Construction Phase:

As Engineer of Record, I verify that the statements initialed by me on the following pages are accurate to the best of my knowledge.

Nerratives for all credits have been provided and updated as necessary with the final design submission.

Calculations have been provided, according to the credit requirements, and updated as necessary with the final Agiasimdus ngiaeb.

Arkady Kats Name

08/01/2011

Vice President Title

Signature

5 Date

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Architects	Engineers	
N.	1.00	Site
q	AR	S1.6R - Environmental Site Assessment_ A Phase I Environmental Site Assessment as described in ASTM E1527-85 was conducted. If the Phase I indicated contamination, then a Phase II ESA was conducted and the site was remediated as required.
Not Feasible	Nol Fessible	S1.7 - Brownligtd Redevelopment
		This project site was determined to be contaministed by the method indicated below. A number of the site ASTM E 1903-97 Phase II Environmental Site Assessment. OR
		Defined as a Brownlield by a New York City, New York State, or federal government agency. OR
		Peg. 40CFR Part 763
		Local Voluntary Disanup Program (Such as with NYC DEC).
Not Feasible	Not Feasible	S3.1 - Site Development, Protect or Resigne Habitat
		The project site was previously developed or graded and 50% of the site area was restored using native and/or adaptive platings.
		The total site area excluding the building toolprinit is:
		The total site area that has been restored using native and/or adaptive plantings is:
		The percentage of site that has been restored using native and/or adaptive plantings us

Water

There are no construction Phase Water Section credits.

A

Energy

E3.1R - Measurement & Verification

This project implements a Measurement & Varification (M&V) Plan consistent with IPMVP Option C - While Building Comparison

E5.1 - Green Power

The SCA has provided documentation to the Design Team that they have applied for and have received approval for obtaining the required 35% building electrical consumption through Green Power credits.

Page 2 of 4



		Materials
Not Fossible	Not Feesible	Mt.2 & M1.3- Building Reuse, Maintain Existing Walls, Floor & Rool On this project, the following percentage of the existing floor, wall and rool structure of the existing building were reused. I have provided a completed copy of the Building Reuse Form. D 76%
		E1 96%
Not Feasible	Not Feesible	M1.4 - Building Reuse, Maintain Interlor Non-Structural Elements
m		On this project, 50% of the existing interior non-structural elements from the existing building were recard. I have provided a completed copy of the Building Reuse Form.
111		M2.18 - Recycled Content
y	-	The instensis for this project include 10% or more recycled content. A Recycled Content Summary Form has been submitted as documentation.
n		□ 20% ·
(11		M2.3 - Regional Materials
1		The materials for this project include 10% or more regional materials (extracted, processed and manufactured). Λ Regional Materials Summary Form has been submitted as documentation.
		D 20%
~		Indoor Environmental Quality
		03.18 - Low Emitting Materials, Adhesives and Sealants
1		All adhesives and sectants used on the interior of the building comply with the VOC limits and requirements. A Low Emitting Materials - Summary Form has been submitted as documentation.
0		Q3.28 - Low Emilting Materials, Paints and Costings
1		All paints and coatings used on the interior of the building comply with the VDC Intits and requirements as extablished by Green Seel Standard GS 11 Painty, and Green Seal Standard GC 03, Arti-Corrosive Paints, and Fouth Coast Air Cuality Managament District. A Low Envitting Materials - Summary Form has been submitted as documentation.



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03.3R - Low Emitting Materials, Flearing Systems

All carpet and carpet cushions for the project meet the testing and product requirements of the Carpet and Rug Institute's Green Latel Plus program. A Low Emitting Materials - Summary Form has been submitted as documentation.

03.48 - Low-Emitting Materials, Composite Wood & Apriliber Products All composite wood and agriftee products used on the interior of the building (defined as inside the weatherprophing, system) contain no added uses formatidehyde resins. Laminaling adhesives used to labricate un-site and shopappled composite wood and sovifiber assemblies contain no added unea-formaldehyde regine.

08/01/2011

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Additional Cr	edits	
Not Authorized	Not Authorized	A4.1 - Low Emitting Materials, Furniture and Furnishings The SCA/FFE group has provided written documentation to the design team indicating that each furniture system (work station) and seating product item is Greenguard certified or registered or that its emissions meet or exceed the best practice air emissions standards as established by the US EPA's Environmental Technology Verification (ETV).
Not Authorized	Not Authorized	A4.2 - Low Emitting Materials, Celling and Wall Systems All celling and wall systems meet the requirements. A Low Emitting Materials-Summary Form has been submitted as documentation.
Not Authorized	Not Authorized	A5.1 - The School Building as a Teaching Tool Built-in architectural features or signage have been developed to communicate the sustainable features of this project. These are supported by educational program, literature or curriculum related to the sustainable features of this project. A descriptive narrative has been submitted as documentation.

08/01/2011

Page 4 of 4

Contractor's Certification Form, Construction Phase.

SCA GSG committee indicated, in 22Jun2018 meeting minutes that Form is acceptable. However, Contractor should select only 1 option. The option for interior only project should not be checked off.

Contractor's Certification Form SCA CONSTRUCTION PHASE **School Construction Authority** NYC Green Schools Rating System Contractor: Firm Name: EW Howell Date: 5/18/2018, Revised 6/28/2018 Address: 245 Newtown Road - Suite 600 Project Name: P.S. 49 Queens Addition Plainview, NY 11803 Project Address: 63-60 80th St (btw Juniper Blvd S & Penelope) Telephone: (516) 921-7100 Middle Village, NY 11379 mrooney@ewhowell.com email: Contractor's Statement I verify that the sustainable requirements summarized below have been achieved. Molly Rooney Assistant Project Manager Name Title Contractor's Initials Site MR S 1.1R - Construction Activity Pollution Prevention An erosion and sedimentation control plan complying with NYS DEC SPDES General Permit V for Construction Activity, including measures from NYS DEC Standards and Specifications for Erosion and Sediment Control in accordance with the specification Section 02200, was implemented. (Although not required by NYS DEC SPDES, a Best Management Practice (BMP), a Soil Erosion and Sediment Control Plan was implemented.) OR Project is completely interior and a dust control plan has been submitted in accordance with specification Section S01900 and such plan was implemented. (Darcon Construction Inc provided a dust control plan that covers the exterior environment of the building; an additional dust control plan was provided by the construction contractor, EW Howell, for the interior of the building.) Materials M 1.5R - Construction Waste Management 50% me The project implements a waste management plan that diverts 50% of the construction waste away from landfills and incinerators. A Construction Waste Management Plan and calculation tables have been submitted as documentation in accordance with Specification Section S01524. M 1.6 - Construction Waste Management 75% MR The project implements a waste management plan that diverts 75% of the construction waste away from landfills and incinerators. A Construction Waste Management Plan and calculation tables have been submitted as documentation in accordance with Specification Section S01524. Not reached M 1.7 - Construction Waste Management 95% The project implements a waste management plan that diverts 95% of the construction waste away from landfills and incinerators. A Construction Waste Management Plan and calculation tables have been submitted as documentation in accordance with Specification Section S01524.

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Contractor's Certification Form CONSTRUCTION PHASE

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Indoor Environmental Quality

MR

Q2.1R - Construction IAQ Management Plan, During Construction

- A copy of the Indoor Air Quality (IAQ) Management Plan for construction developed and implemented for this project has been submitted as documentation in accordance with Specification Section 01550.
- Permantently installed air handling equipment was not used during construction.
- Permantently installed air handling equipment was used during construction. The chart below has been $V\,$ completed for filtration media used during construction.

Merv Rating	Filter Manufacturer	Filter Model #	Location of Installed Filter	Filter Replaced immediately prior to Occupancy (YES or NO)
13	Purolater, PuroGreen	PR13-STD2 24x24x2	RTU-1 (Final Filter)	Yes Before Flush- out
13	AAF International	Varicell Type SH, DH, XL	RTU-1 (Final Filter)	Yes After Flush- out
7	AAF International	Perfect Pleat HC 2"	RTU-1 (Pre- filter)	Yes After Flush- out
			· · · · · · · · · · · · · · · · · · ·	

I have provided six photos showing IAQ practices which were used during the building construction from SMACNA IAQ Guideline for Occupied Buildings under Construction, 1995, Chapter 3. Each photo is labelled V indicating which SMACNA IAQ practice is shown.

For Phased Occupancy or Modernization Projects, a letter has been submitted stating that carpeting in occupied areas was HEPA vacuumed daily.

MR

Q2.2R - Construction IAQ, Management Plan, Before Occupancy

A building flush-out was carried out per the specification requirements in Specification Section 01550.

I have provided a narrative describing the project's specific flush-out procedures including data regarding $\sqrt{}$ temperature, airflow, filters used during flush-out and duration of the flush out.

AND

 $V_{\rm c}$ I have provided a construction schedule showing building flush-out as documentation.