ENTRY FORM

DVASE
2010 Excellence in Structural Engineering Awards Program

PROJECT CATEGORY (check one):

New Building under $30M		Other Structures Under $10M	
New Building over $100M		Other Structures Over $10M	
New Building $30M - $100M	X	Free Style	

Approximate construction cost of facility submitted:	$52 Million
Entry Fee:	**FREE**
Name of Project:	The Salvation Army Ray and Joan Kroc Corps Community Center
Location of Project:	Philadelphia, Pennsylvania
Date construction was completed (M/Y):	December 18, 2008 (Construction Documents Issued) October 2011 (Anticipated Date of Construction Completion)
Structural Design Firm:	CVM Engineers
Affiliation:	**All entries must be submitted by DVASE member firms or members.**
Architect:	MGA Partners– Philadelphia, PA
General Contractor:	TN Ward

Company Logo (insert .jpg in box below)

Provide a concise project description in the following box (one page maximum). Include the significant aspects of the project and their relationship to the judging criteria.

The Salvation Army Ray and Joan Kroc Corps Community Center is made possible by a grant from the Ray and Joan Kroc Foundation. Situated on a former industrial site in North Philadelphia, the center will offer a variety of educational, recreational, spiritual, and social services to the surrounding community. The building itself consists of 105,000 SF of mixed use space including a two pool natatorium, a gymnasium and fitness center, a worship center, a daycare center and general multipurpose, work, and classroom space. The site also boasts several athletic fields and an outlying pavilion and classroom to support the Salvation Army's farm work program.

The building is founded on conventional spread footings, designed for an allowable bearing capacity of 3000 psf. Due to the former industrial use of the site, careful and constant monitoring of the soils was required during excavation.

The building's superstructure is steel framed with an expansion joint separating the two story main building from the 40 foot tall single story natatorium. The main building derives its lateral stability from the use of semi-rigid moment connections, while the natatorium utilizes fully rigid moment connections as its lateral system.

The building's second floor and portions of its roof were designed as composite construction. During design, special attention was paid to vibration at the second floor fitness center and dance studios, which are in close proximity to the building's worship center.

While the metal roof deck is typically supported by steel beams, long span steel joists are used to clear span the natatorium, gymnasium, and worship center. As these joists support large roof top mechanical units and screen walls at the natatorium, basketball nets in the gymnasium and moveable AV and lighting equipment in the worship center, multiple load diagrams were required to fully document the numerous special loading conditions that exist. A close working relationship was established with the joist fabricator during the CA phase to ensure that all conditions were understood and incorporated into the final joist design.

The building's façade is a mix of brick, curtain wall, and metal panel, supported by a metal stud back-up system. Multiple, secondary HSS frames were used throughout the building to support these elements.

Other notable aspects of the design of the Kroc Center include the two story main lobby featuring exposed steel columns and expansive use of curtain wall to deliver sweeping views of the site, the east porch and main entrance showcasing exposed steel beams and solid wood decking, and the beacon, a symbolic gesture along Wissahickon Avenue, achieved through the use of a custom fabricated triangular steel column and cantilevered HSS members.

Construction is slated to be complete and the building dedicated in October of 2010.

Please attach your photos as previously described in the call for entries document and insert captions for the photos in the following boxes.

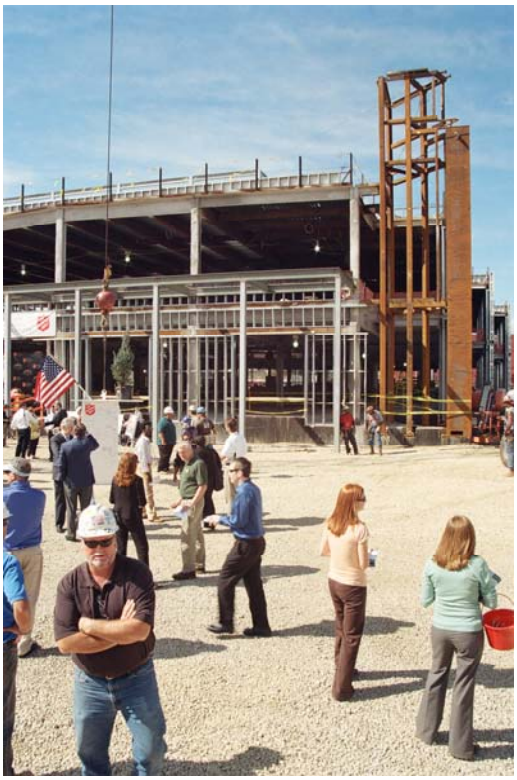
Photo 1:

Arial rendering of the building and site.

Photo 2:

View of steel framing at two story main lobby.

Photo 3:



View of steel framing at the beacon at the northeast corner of the site.

Photo 4:

View of exposed steel and wood decking at the east porch.

Photo 5:

View of steel framing at the south façade.

By signing, signatory agrees to the following and represents that he or she is authorized to sign for the structural design firm of record:

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Submitted by:

Print name: **Julie Poeschel, PE**	**Signature:** 	**Date:** **4-19-10**

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