Timothy (Tim) L. Schmitz, P.E.

3260 Isoline Way
Smyrna, Georgia 30080
404.664.6383/cellular; 678.298.1823/facsimile
Tim@StrEngSolutions.com

EDUCATION

Auburn University, Auburn, Alabama, ***Masters of Science of Civil Engineering (Structures),*** 1991

Auburn University, Auburn, Alabama, ***Bachelor of Science of Civil Engineering***, 1989

EXPERIENCE

Principal Structural Engineer/President
Structural Engineering Solutions, LLC
Smyrna, Georgia
August 2005 to present

Senior Bridge Engineer/Project Engineer
ARCADIS G&M, Inc.
Atlanta, Georgia
June 1999 to August 2005

Bridge Engineer
Finley McNary Engineers, Inc. (presently Parson Bridge & Tunnel)
Tallahassee, Florida
January 1997 to May 1999

Bridge Engineer
LoBuono, Armstrong & Associates, *A Bridge Division of Frederic R. Harris*
(presently DMJM-Harris)
Tallahassee, Florida
January 1992 to January 1997

Research Assistant
Auburn University
Auburn, Alabama
April 1990 to December 1991

Programmer/Engineer
Darden Engineers PC
Dadeville, Alabama
August 1989 to April 1990

REGISTRATIONS, AWARDS, AND ORGANIZATIONS

Professional Engineer in Alabama, Georgia, Florida, Kentucky, Mississippi, South Carolina, Louisiana & North Carolina

PCI Fellowship Recipient 1990 and Frederic R. Harris Young Associates Program
Prestressed/Precast Concrete Association and
American Society of Civil Engineers

PROJECTS

Pedestrian Bridge Foundation – North Main Street Sidewalk Project – City of Woodstock, Georgia
Massana Construction, LLC., Tyrone, GA
Structural engineer of the abutments of a 120 foot single span prefabricated steel pedestrian bridge. Abutments were supported on helical piles.

Pedestrian Bridge Foundation – White Provision/West Side Market over Norfolk Southern Railway Pedestrian Bridge – City of Atlanta, Georgia
Contech Bridge Solutions, LLC., Atlanta, GA
Structural engineer of the abutments of a 133 foot single span prefabricated steel pedestrian bridge. Abutments were supported on helical piles.

Pedestrian Bridge Foundation – Paw Creek Village - Triven Properties, Charlotte, North Carolina
Big R Manufacturing, LLC., Atlanta, GA
Structural engineer for the design of pile abutments of a 60'-0" x 2 lane vehicular bridge. Abutments were supported on h-piles.

Culverts A, B & C over Dell Webb Blvd – Sun City Peachtree Development.
North Spalding Development Co., LLC., *Spalding Cty, GA*
Structural engineer for the design of two double barrel and one triple barrel cast-in-place culverts for a large residential development south of Atlanta.

Street A Bridge over Walnut Creek
Design Management Services, *Henry County, GA*
Bridge engineer for the design of a three span PSC plank girder bridge on pile bents and cast-in-place end bents near the entrance of a residential development.

Perimeter Center Parkway over I-285 Steel Erection Analysis
C.W. Matthews Construction, *Dekalb County, GA*
Bridge engineer for a falsework to support and structural analysis of the two steel girder spans over I-285 during steel erection.

Straddle Bent 8 & 9 Falsework and Temporary Work Bridge at SR316/I-85 Interchange
C.W. Matthews Construction, *Gwinnett County, GA*
Structural engineer for a falsework to construct two 126 feet long straddle bents to support the structure for the SR 316 WB to I-85 SB movements. Also, structural engineer for a 60 feet span bridge to support construction equipment over a local creek.

Contractor Services
Varies, *Throughout Georgia*
Bridge engineer for a variety of formwork, falsework, shoring, and temporary structures used to construct transportation structures throughout Georgia as well as analysis of structural bridge elements which have been constructed out of tolerance.

Site and Pond Wall Design
Various, *Throughout Georgia*
Structural engineer for the design of over 40 site and pond walls constructed of cast-in-place concrete, modular block or steepened slope baskets.

Bottomless Culvert Foundation and Headwall Design
Various, *Throughout the Southeast United States*
Structural engineer for the design of over 60 bottomless arch culvert footings (spread or piles) along with slope collar, headwall and permitting as needed for arch spans ranging from 7 feet to 58 feet.

Hydraulic Structures for Gregg Ivey Lake
Ivey Management Corporation, *Upson County, GA*
Structural engineer for a 22' x 7' x 40' tall inlet structure with a 300' long x 7' x 7' culvert outlet

structure for a new lake in South Georgia.

Sweat Crk Run Bridge over Sweat Crk
Greers Chapel Developments, LLC., *Cobb County, GA*
Bridge engineer for a single span PSC plank bridge on pile bents for a high end residential development in northeast Cobb County.

5th Street over I-75/85 - Design/ Build
Sunbelt Structures, Inc., *Fulton County, GA*
Project engineer for the replacement of an existing two-span, two-lane structure over Atlanta's Downtown Connector with a 233-feet wide, two-lane bridge, which will include 48 feet of sidewalk, and 127 feet of grassed and raised bed planters. The construction cost of this bridge is $10.8 million.

Carbo Spur Bridge - Design/Build
Midway Railroad Construction Co., Inc. *McIntyre, GA*
Senior bridge engineer/project manager of a 200-foot long open steel deck trestle bridge and an 80-foot long steel through-girder bridge, which will provide access for Norfolk Southern, trains to a new plant for Carbo Ceramics, Inc.

Contractor Services
Varies, *Throughout Georgia*
Senior bridge engineer for a variety of formwork, falsework, shoring, and temporary structures used to construct transportation structures throughout Georgia.

Wesley Chapel Road over I-20 Temporary Bridge
C.W. Matthews Construction, *Dekalb County, GA*
Project engineer for a four-span, six-lane wide temporary bridge over Interstate 20 in Metro Atlanta. This bridge will be in service for nearly one year and will allow adequate staging of a new bridge on the existing alignment.

Grand Reunion Drive over Sherwood Creek - Bridge 1
John Wieland Homes. *Hall County, GA*
Engineer of Record for a three-span bridge that crosses a perennial tributary. The 39'-2" wide structure is supported by pile bents and AASHTO girders. The structure provides two 11'-6" lanes of traffic and two 5'-1" sidewalks. Architectural features of the structure include the use of a faux granite block finish on the face of the barriers and a custom steel handrail.

Camp Creek Parkway Bridge Redesign
C.W. Matthews Construction/Duke Realty, *Atlanta, GA*
Project engineer for the redesign of a three-span, four-lane bridge providing access to the Camp Creek Business Center adjacent to Hartsfield-Jackson Airport. The 125-foot approach spans will be supported on prestressed bulb-tee girders and the 200-foot main span will be supported by steel plate girders. Responsibilities include the design and supervision of contract document production. The estimated cost of the structure is $3 million.

Norfolk Southern Railroad over SR100
Georgia DOT, *Atlanta, GA*
Quality assurance engineer for a three-span, twin-track structure supported by a concrete deck, steel plate girders, and drilled shaft intermediate bents. Responsibilities include the technical and presentation review of the contract documents and calculations for compliance with GDOT, Norfolk Southern, and ARMEA specification. The estimated construction cost of the bridge is $2 million.

Atlanta's Hartsfield-Jackson Fifth Runway - Earth Conveyor Structures
John D. Stephens/Newco Venture LLC*, Atlanta, GA*
Project manager/engineer for the design of the structures to support 27 million cubic yards of earth along a 3-mile conveyor that will be used to build the new fifth runway. The steel through-truss structures, up to 120-foot spans supported by steel bents, will span I-285, SR85, and Riverdale Road. The 100-foot, open-deck steel plate girders will span the Flint River and various wetlands. Respon-

sibilities included the design, drawing, production/supervision, and contractor support during erection. The estimated cost of the full conveyor system is $12 million.

Atlanta's Hartsfield-Jackson Fifth Runway - Taxiway Structure

City of Atlanta, *Atlanta, GA*

Project engineer for the preliminary design of a 584-foot, four-span taxiway structure spanning current and future I-285. Responsibilities included the design and drawing supervision of the cast-in-place substructure and 90-inch pre-stressed bulb-tee supported superstructure. The estimated construction cost for the bridge is $25 million.

Sandy Plains Pedestrian Bridge

Cobb DOT, *Marietta, GA*

Project manager for design of a cast-in-place and precast concrete pedestrian bridge spanning Sandy Plains Road in northeast Cobb County. The bridge will provide access from a county library, senior center, elementary school, and art center to the East Cobb Aquatic Center and other county facilities. The estimated construction cost is $1 million.

CSX Railroad over DL Hollowell Parkway

Georgia DOT, *Atlanta, GA*

Project engineer for the preliminary design of a Temporary single-rail multi-span steel through-girder and steel girder trestle bridge.

Emory University Bridge over CSX Railroad

C.W. Matthews Construction, *Atlanta, GA*

Project engineer during the construction of a three-span, curved steel plate girder bridge over the CSX Railroad. The 600-foot radius bridge, totaling 444 feet in length, provides additional local access to and from the university dormitories. Assignments included the evaluation of the erection procedure, the design of the skewed and normal falsework towers, the examination of the stresses and deflections in the plate girders during erection, and contractor support.

U.S. 17A Bridge over I-26

South Carolina DOT, *Berkeley County, SC*

Project engineer for the final design of a 360-foot-long, 145-foot-wide, four-span bridge replacement. The structure, which was analyzed for seismic performance Category D loads, is located on a main arterial between the northern suburbs and the City of Charleston. The 145-foot-wide superstructure is supported by bulb-tee and AASHTO girders, which are supported by traditional bents and drilled shafts.

I-520/SR56 Interchange Improvement

Georgia DOT, *Augusta, GA*

Project engineer for the bridges included on 3.5 miles of total roadway improvements with 1.7 miles of interstate. The project required the widening of 2 two-span continuous cast-in-place, post-tensioned, multi-cell box bridges. The total length of the widening is 750 feet, and the project is estimated to cost $1.5 million. Project included the supervision of design, detailing, and contract document production, as well as the design of 500 feet of widening of one of the bridges.

Steve Reynolds Boulevard over I-85 Widening

Gwinnett County DOT, *Atlanta, GA*

Project engineer for the final design of a two-span, bulb-tee supported interstate crossing totaling 206 feet located in north Atlanta. To alleviate the congestion on this urban arterial, the existing five-lane structure will be widened on both sides to a divided six-lane bridge. Tasks included the review of the design and supervision of the contract document production.

I-985/SR53/SR13 Split Diamond Interchange
Georgia DOT, *Gainesville, GA*
Project engineer for the preliminary design of three bridges and eight retaining walls estimated to cost $26 million. The interstate crossing, approach ramps, and minor arterial bridge lengths total 231 meters and are supported by typical prestressed girders. Tasks include the preliminary design of all elements and supervision of the final design.

I-895 Interchange
Recchi America, *Richmond, VA*
Bridge engineer during the construction of the span-by-span approaches to the new I-895/I-95 interchange south of Richmond. Tasks included the evaluation and retrofit of existing twin triangular erection trusses. The evaluation included the design of a new nose, a new tail, and inspection of the truss.

Evans Crary Senior Bridge
PCL Civil Constructors, *Stuart, FL*
Bridge engineer during the construction of a replacement bridge from the City of Stuart over the Intracoastal Waterway to Hutchinson Island. The new struc-tures are twin 17-span segmental concrete box bridges build by the span-by-span method, which was originally designed by the balanced cantilever method. Tasks included the design, review of the fabrication, and contractor support of the erection truss and shoring towers used to temporarily support the 55-meter spans. This truss is believed to be the longest span-by-span erection truss in the United States. Other tasks included the design of segment-lifting frames and the design of miscellaneous equipment for lifting the truss using wenches. In addition, the originally designed substructure was analyzed for the new loads due to the new construction method and ship impact using FLPier.

Sailboat Bridge
Traylor Brothers, Inc., *Delaware County, OK*
Bridge engineer during construction of twin 25-span segmental concrete box bridges built by the span-by-span method. This bridge allows traffic on U.S. 59 to cross The Grand Lake of the Cherokees and replaced an existing bridge. Tasks included the design and review of the fabrication and contractor support for the twin triangular erection trusses and shoring towers that temporarily supported each 37-meter span during erection. Other tasks included the design of temporary seal slabs for the waterline footings, lifting beams, cast bed foundations, and coffer-dams.

17th Street Causeway
Traylor Brothers, Inc., *Ft. Lauderdale, FL*
Bridge engineer during the construction of a $74 million, high-level bascule with segmental concrete box approaches constructed by the balanced cantilever method. Tasks included the review and design of the bascule pier shoring system for erection and lateral loads, design of the stability towers for the approach span erection, design of a stability tower prop used in the approach span erection adjacent to the bascule piers, design of segment-lifting frames, and the design and review of the bascule pier cofferdams.

Central Artery/Tunnel, Storrow Drive Connector Bridge
Daniel O'Connel & Sons, *Boston, MA*
Bridge engineer for construction of a three-span, variable depth steel box girder over the Charles River. The superstructure was erected in nine sections, with the center three main span sections preassembled on barges and jacked into place. The assignment included the evaluation of the erection procedure for stresses, deflections, and stability.

Neuse River Trestle VECP
Traylor Brothers, Inc., *Craven County, NC*
Bridge engineer during the construc-tion of a $94 million interchange

near New Bern. The effort included the value engineering of the AASHTO girder approach bridge by dropping one line of girders. The 11 four-span units, with spans of 35 meters each, were supported by 78-inch modified bulb-tee girders. The assignment included designing nearly 300 girders, supervising the drafting effort, and providing contractor support.

Blackwater Bridge

Traylor Brothers, Inc., *Santa Rosa County, FL*

Bridge engineer during the construction of a $30 million emergency design-build bridge replacement of twin 3,000-foot-long bridges with one mile of approach roadway and associated civil work. Continuous plate girder construction with typical approach spans of 184 feet, plus several flat slab approach spans at the east end, were used for the superstructure. The channel unit has three spans of 184 feet by 220 feet by 184 feet. Assignments included the evaluation of the existing bridge for crane loads, load rating of flat slab approaches, evaluation of the deck pouring sequence, and contractor support.

Bayou Chico Bridge

PCL Civil Constructors, Inc., *Escambia County, FL*

Bridge engineer for the construction of a 2,290-foot-long, high-level, fixed-span bridge that carries six lanes of SR292 over Bayou Chico. The bridge consists of 15 approach spans utilizing precast, prestressed girders with a cast-in-place concrete deck, and a three-span main navigation unit composed of post-tensioned segmental I-girders. Efforts included contractor support and the design of the precast seal slabs for the waterline footings.

Santa Rosa Bay Bridge

Odebrecht Constructors, Inc., *Santa Rosa County, FL*

Bridge engineer for the construction of the 3.5-mile-long, segmental concrete box bridge from Garcon Point to Gulf Breeze, Florida. The 131-span structure was built by the span-by-span method. Work included the design, review of the fabrication, and contractor support for an erection truss and shoring towers used to support a full span of segments during the erection of each span. Other duties included contractor support, the design of a precast box pier erection platform, and the analysis/design of two short span bridges for a deck replacement with a new cross slope.

Midpoint Bay Bridge

The Hardaway Company (presently The Granite Corporation), *Lee County, FL*

Bridge engineer for the construction of the Midpoint Corridor Bridge over the Caloosahatchee River near Fort Myers, Florida. This 7,172-foot-long bridge consists of both low- and high-level approach spans. The three-span segmental I-girder main channel unit, 520 feet in length, is supported by continuous two-staged, post-tensioned, 78-inch bulb-tee girders. Assignments included the design and contractor support for the temporary towers to stabilize the side spans of the main channel unit.

Palmetto Expressway Interchange at NW 36th Street

Florida DOT, *Miami, FL*

Bridge engineer for four bridges in the $32 million interchange. Efforts included the complete design of the straight 160-foot simple span steel box mainline bridge and coordination of the drawings for two flyovers and a widening of a short span bridge.

Boston Central Artery/Tunnel (I-93/I-90)

Massachusetts Highway Department, *Boston, MA*

Design engineer for the final design of 8,000 feet of elevated highway that links the Third Harbor Tunnel with south Boston and the Massachusetts Turnpike. The tasks included the design of the seismic restraints, special segments (abutment, expansion joint, pier segments on bearings, and fixed pier segments),

and preliminary and final design of drilled shaft substructure elements.

New Woods Bridge
CBCL, Macaan*, Nova Scotia, Canada*
Design engineer for the preliminary design of a 160-meter, three-span concrete box bridge. The incrementally launched bridge was designed to progress in 15-meter segments and rest on permanent and temporary supports. Assignments included the superstructure design of the initial post-tensioning for launching and the final continuity post-tensioning.

Bridge of Lions
Florida DOT, *St. Augustine, FL*
Design engineer for the preliminary design to replace or rehabilitate a historic 1,545-foot-long bridge consisting of 12 steel arch spans and a double-leaf bascule span. Tasks for the new bridge included the preliminary structural design and quantity estimates of the bascule span, and the evaluation of arched prestressed concrete approach spans with a new span arrangement to accommodate a larger navigational opening. Assignments for the rehabilitation entailed the struc-tural evaluation of replacement components on the existing bridge. For both options, a lateral load analysis was performed considering scour and ship impact using FLPier.

SR85 Over the Boggy Bayou (U.S. 85/20)
Florida DOT, *Valparaiso, FL*
Design engineer for the preliminary and final design of the 309-foot curved, 12-span, six-lane flat slab bridge over the Boggy Bayou in northwest Florida. Assignments included establishing the design criteria; designing, detailing, and load rating the cast-in-place flat slab superstructure; and designing and detailing the pile-supported substructure for lateral loads.

Roosevelt Bridge Replacement
Florida DOT, *Stuart, FL*
Design engineer during the construction phase of the $46 million, twin high-level bridge structure over the St. Lucie River. Project features 4,545 feet of dual concrete segmental box superstructure with 65 feet maximum vertical clearance on cast-in-place fixed piers. The 1,160-segment structure was constructed by the balanced cantilever method using an overhead gantry. Representing the client, tasks included the review of all shop drawings and procedures used to construct the bridge.

Christa McAuliffe Bridge
Florida DOT, *Merritt Island, FL*
Design engineer for the rehabilitation of an existing five-span bascule bridge and the design of a new three-span parallel double-leaf bascule bridge. The 298-foot bridge carries SR3 over the Canaveral Barge Canal near the Kennedy Space Center. The work included the review and retrofit of the existing bridge's composite steel and concrete approach spans and bascule spans. In addition, the work included the design of the new bridge's bascule span with AASHTO girder approaches and post-design services on behalf of Florida DOT during construction. For both structures, a lateral load analysis was performed considering scour and ship impact.

Florida Turnpike Widening
Florida DOT, *Delray Beach, FL*
Design engineer for two bridges: one carrying Florida Turnpike traffic over Lateral Canal No. 38 and the other, Ramp AB, a new flyover providing access to a toll plaza. The first bridge is a widening of a three-span bridge using concrete and prestressed concrete. The second is a replacement of a two-span prestressed girder flyover. Assignments included the design and production supervision of various components of both bridges.