



ACI Virginia Chapter Commonwealth Award



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ACI – Virginia Chapter



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Commonwealth Award Details

SUBMISSION CATEGORIES

Low Rise

Mid Rise

High Rise

Infrastructure*

Decorative
Concrete*

Repair &
Restoration*

Flatwork

JUDGING CRITERIA

- Architectural & engineering merit
- Creativity
- Innovative construction techniques, solutions, & use of materials
- Ingenuity
- Sustainability & Resilience
- Functionality & end use suitability



Finalist – Infrastructure

Lakeside Drive Bridge and Roundabout City of Lynchburg, Virginia

- Submitted by AECOM
- Need to relocate Lakeside Drive downstream of College Lake Dam
- 366 ft, 4 lane bridge and five-leg roundabout
- More than 3,400 cy of concrete with a range of mix types throughout the project
- Cost-effective, low maintenance solutions



Finalist – Infrastructure

Route 189 Bridge over Blackwater River
City of Suffolk / Southampton County,
Virginia

- Submitted by Bryant Structures
- Replaces 1940 swing-span truss bridge
- New, taller 800 ft long x 35 ft wide bridge with a jointless deck
- Extends bridge length for floodwater overflow
- Underwater demolition of existing pivot pier
- Setting four 120 ft, 53 ton PCBTs over river



Finalist – Repair & Restoration

Route 17 Bridge over James River
Hampton Roads, Virginia

- Submitted by Virginia Department of Transportation
- Concrete deterioration accelerated by river spray
- Restore load capacity with limited budget and limit traffic disruptions
- 29 beams were repaired with SCC and surface mounted CFRP
 - Epoxy waterproofing applied
- Project completed 5 months ahead of schedule without traffic disruptions



Finalist – Decorative Concrete

Bridge the Gap – Phase II
Roanoke River Greenway
City of Roanoke, Virginia

- Submitted by Chandler Concrete
- Final 1 mile of the trail to connect Arial Way Drive with the main trail
- Solution was needed to improve views for the final section
- Cost saving alternative
- High durability and maintenance free



Commonwealth Award Winner

Lakeside Drive Bridge and Roundabout
City of Lynchburg, Virginia



Lakeside Drive Bridge & Roundabout Goals and Challenges

- Withstand flooding concerns
- Cost-effective solution
- Limit impacts to Blackwater Creek
- Aesthetically pleasing
- Long-term durability and low maintenance



Lakeside Drive Bridge & Roundabout Project Solutions

- 77-inch prestressed concrete bulb-T girders with 8000psi concrete
- Jointless configuration
- Low permeability, low shrinkage concrete
- Stainless steel reinforcing
- Drilled shaft foundations with SCC concrete
- Ornate open-style railing
- Textured and colored concrete



Lakeside Drive Bridge & Roundabout Project Team

- Owner
 - City of Lynchburg
- Structural Engineer
 - AECOM Technical Services
- Prime Contractor
 - English Construction Company
- Concrete Contractor
 - English Construction Company
- Concrete Supplier
 - Lynchburg Ready Mix



Thank you

For more information about the ACI Virginia Chapter, please visit our website at www.acivirginia.org



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