# Single Engineering

# NORTHERN COLORADO LOCAL BUSINESS

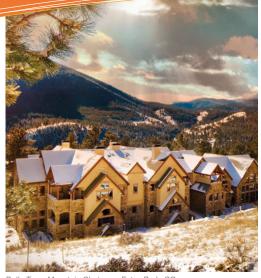
Since 1985, Shear Engineering Corporation has been operating in Fort Collins, CO serving clients across all of Colorado, Kansas, Nebraska and Wyoming with exceptional engineering services, as well as attracting large contracts to the Northern Colorado area.

# AWARD WINNING

Brian Shear, P.E. was a recipient of the Larimer County Building Dept. Recognition for Outstanding Professionalism Through the Construction Process 2003 Award.

# PERSONAL ATTENTION

Don't get lost dealing with a huge firm. At Shear Engineering Corporation you will always receive personal and professional work without the run-around.



Della Terra Mountain Chateau-Estes Park, CO

Shear Engineering has been offering a complete range of civil and structural engineering services since 1985. We are committed to providing each client with close personal attention and direct communication. We have assembled a talented staff with an extensive range of professional experience and are professionally registered in Colorado. Kansas. Nebraska and Wyoming. Our dedication is evident in our work, sound in both content and presentation. Our work reflects our dedicated commitment to serving each of our customers.

#### SERVICES AVAILABLE

Structural Engineering Services Civil Engineering & Sitework Services Consulting, Training, Support

# **CONSULTING TRAINING & SUPPORT SERVICES**

For expert technical consulting and training, Shear Engineering Corporation is happy to assist you to make your project a success without expensive subcontracting. Our services include:

- City and County Building and Development process support
- Construction Process Support
- Inspections, Bidding and bidding review, Contractor Selection
- Retaining wall design construction issues
- Value Engineering

# STRUCTURAL ENGINEERING SERVICES

Shear has a versatile range of structural design experience including residential, commercial, industrial and agricultural structures. Involvement includes numerous commercial building additions, residential projects, agricultural post-frame buildings and even special industrial structures designed to meet specific unique needs. Our services include:

# STRUCTURAL DESIGN

- Foundation design (commercial / agricultural / pre-manufactured structures)
- Alternative foundation foam form systems
- Structural design (commercial / agricultural / pre-manufactured
- Commercial additions & remodels
- Retaining wall design (segmental, concrete, masonry)
- Deck foundation and structure design
- Pergola foundation and structure design
- Structural warranty inspection record
- Building permit submittal application support
- HUD / FHA (Housing and Urban Development) observations & certifications
- Truss loading and structure modification recommendations
- Rough sawn / glulam site assembled trusses
- As-Built certifications of observable compliance
- Residential wind turbine support analysis
  - Pedestrian and vehicle bridge analysis and design



#### CONSTRUCTION

- Excavation observations
- Footing formwork & footing reinforcing placement observations
- Foundation wall steel placement observations
- Alternative foundation foam form system observations
- Perimeter drain installation & dampproofing observations
- Framing observations
- Caisson construction observations
- Basement structural subfloor observations (steel
- Structural steel bolt and weld observations & certifications
- Ufer Ground inspections

# Shear Engineering Corporation

#### **CIVIL ENGINEERING & SITEWORK SERVICES**

The team at Shear provides comprehensive development designs for future infrastructure. Our team stays within budget, efficiently completing projects that match the needs and vision of our clients. Our experience encompasses all of the following:

#### SITE WORK AND GRADING

- Site work design (subdivisions/commercial sites/recreational sites)
- Street, highway and bridge design
- Pedestrian underpass and bridge design
- Striping and signage plans
- Sanitary sewer / force main design
- Water Utility System Design
- Lift station design

#### WATER & STORMWATER

- · Rehabilitative drainage improvements for existing facilities
- Erosion Control Design
- Water quality and Best Management Practices design
- Detention pond design (Subdivision/Regional)
- Irrigation Ditch facility design / ditch company agreements
- Drainage, Erosion Control & Water Quality Reports
- Water & Wastewater Impact and Demand Analysis Report
- Master Drainage plans & modeling
- Stormwater management design
- Stormwater Management Plan (SWMP) / Report
- Floodplain analysis, research, and studies (including FEMA process)

#### **EASMENTS AND DEDICATIONS**

- Variance request / process
- Modification Request / process
- Easement dedications / vacations
- Street oversizing reimbursement requests
- Right-of-way dedications / vacations
- Development Process representation

### SITE SPECIFIC

- Site Plan
- Grading design
- Site Grading certification
- Elevation certificate
- Building setback certification

#### CONSTRUCTION

- Cross sections and earthwork quantities
- Quantity takeoffs and construction cost estimates
- Construction contract documents
- Construction bidding and negotiations
- Development Construction Permits
- CDOT Certified Erosion Control Supervisor Stormwater Management During Construction
- Construction Certifications
- Construction Administration & Observation

#### OTHER

- Development site investigation prior to purchase of property
- Site application to the State of Colorado / Package treatment plant design / coordination
- Oil well specifics
- Railroad crossing applications / Public Utilities Commission approvals
- Special Improvement Districts
- Metro Districts
- Water and sewer demand study and report
- Traffic Control
- Site Distance analysis / easement
- Stormwater Construction Permit
- State Construction Dewatering Wastewater Discharge Permit
- 401/404 Permit obtained from the Corps of Engineers



From Left: Eagle Ranch Estates—Larimer County, CO Residential Wind Turbine—Cheyenne, WY Custom Home—Fort Collins, CO

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