Mountain View Corridor
Right-of-Way Acquisition Using a CMGC Contracting Approach

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Presentation Agenda

- Mountain View Corridor (MVC) Project Introduction
- Introduction to CMGC Contracting (CMGC 101)
- Benefits of CMGC Contracting on the Right-of-Way Acquisition Process
  - MVC Specific Advantages
  - General Advantages of CMGC Contracting
- Discuss Some of the Unique and Unusual Acquisitions Encountered on the Project
Greenfield Project
140 Residential Relocations, School, & Utility Corridor
Golf Course
Industrial Park
Project Location
A Balanced Transportation Solution

- The Mountain View Corridor is a balanced transportation solution which includes a freeway, transit and trail system.
Phasing – Outside Lanes

Initial Construction
Phasing – Outside Lanes

Full Freeway Build-Out
Phasing – Frontage Roads – 9 miles
Phasing – Frontage Roads

Full Freeway Build-Out
Current Project Status

- Utah County (2009 to 2011)
  - Low bid
  - 3 mile segment
Current Project Status

• Salt Lake County (2010 to 2012)
  – CMGC
  – 15 mile segment

• Utility Relocation (2012 to 2014)
  – 1.5 mile segment
Salt Lake County CMGC Project

- 6 Million cubic yards of earthwork
- 300,000 tons of asphalt
- 300,000 square yards of concrete
- 170,000 lineal feet of storm sewer
- 160,000 square feet of retaining wall
- 10 Highway Bridges
Challenges

- No right-of-way purchased
- Utility complications
- Greenfield project / unknown risks
- Third-party development
- Municipal coordination (13 cities)
Contracting Delivery Methods

Low Bid

- Pre-construction
  - Designer

- Construction
  - Contractor

CMGC

- Pre-construction
  - Contractor
  - Designer

- Construction
  - Contractor
  - Designer

Design Build

- Construction
  - Contractor
  - Designer
What is Design-Bid-Build Contracting?

Traditional “Design-Bid-Build” Contracting involves:

- Two Contracts
  - Design
  - Construction

- Agency Owns All of the Risk

- ROW acquired by the Agency
  (Staff Agents and or Consultant Agents or Firms)
What is Design-Build Contracting?

• Design-Build Contracting
  – Combines Project Design and Construction into One Contract.
  – Expedites project delivery process.
  – Encourages the contractor to use innovative construction techniques to:
    • lower project costs
    • streamline project delivery
  – Contractor assumes risks
What is CMGC Contracting?

- CMGC Contracting
  - Owner selects a Construction Manager in design (preferably early) based on qualifications, past experience, or best value.
  - Construction Manager enters into a consultant contract to provide constructability input during design.
  - Once the design is complete, Construction Manager is given the opportunity to provide a bid for the construction.
  - Contractor and Agency share and agree on risks.
  - ROW acquired by the Agency (Staff Agents and or Consultant Agents or Firms)
Owner

Collaboration

Design Subs

Designer Of Record

Construction Manager

General Contractor

Trade Subs

Preconstruction

Construction
CMGC Benefits

Collaboration but owner retains control of design

Innovation

Risk

Improved Constructability

Mitigation

Optimizing the Schedule

Flexibility

Cost Certainty
When to consider CMGC

When the owner needs contractor feedback during design.

Projects with:

- Inherent 3\textsuperscript{rd} Party Risk
- Technically Complex/Introducing New Technology
- Complex Staging
- Significant Schedule/Budget Constraints
Contracting Method Risk Assignment

- **DBB**: Contractor Risk: 2/3, Owner Risk: 1/3
- **CMGC**: Contractor Risk: 1/3, Owner Risk: 2/3
- **DB**: Contractor Risk: 1, Owner Risk: 0
Why CMGC for the MVC Project?

- Contractor Innovations
- Expedited Start
- Risk Items difficult to allocate to contractor
Why CMGC?

- Contractor Innovations
- Expedited Start
- Risk items difficult to allocate to contractor
- Concurrent procurement with I-15 CORE
MVC Right-of-Way Facts

- $750 million program
- $266 million ROW budget (ROW budget > Construction Budget)
- 446 ownerships (9 condemnations)
- No right of way acquired at the time that UDOT hired the Contractor
- Acquisition completed under budget and on time
- Zero construction delays due to ROW
How did CMGC Improve MVC R/W Process?

- Allows DOT to prioritize acquisition schedule to match the Contractor’s actual construction schedule & sequencing
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- Allows DOT to prioritize acquisition schedule to match the Contractor’s actual construction schedule & sequencing
- Allows owner to involve the contractor in the solution
Example: Frito-Lay

- Frito Lay future expansion project
- Economic development concerns expressed by local municipality
- UDOT Goal: “Strengthen the Economy”
- Solution: excavate existing property to provide more developable land for expansion
- Shorter haul route for contractor
Frito-Lay “Win-Win-Win” Solution
Frito-Lay Under Construction
Frito-Lay (After Construction)
Frito-Lay (After Construction)
Example: Western Springs Park Sledding Hill
Example: Western Springs Park Sledding Hill
Sledding Hill – Detention Basin
Sledding Hill Under Construction
Example: Well Park Road Closure

Permanent Closure of Well Park Road

Solution: Extend Feulner Park
Feulner Park Extension
Feulner Park Under Construction
How did CMGC Improve MVC R/W Process?

- Allows DOT to prioritize acquisition schedule to match the Contractor’s actual construction schedule & sequencing
- Allows owner to involve the contractor in ROW solutions
- Increased Flexibility
  - Allows owner to work with Contractor to have flexibility to resolve ROW issues
Example: Kennecott Rail Relocation

Cost-to-cure agreement with railroad owner to:

• Abandon 2.5 miles of rail & relocate track west of MVC
• Eliminate two railroad bridges ($20 million savings) and two at-grade crossings
• Convert 2 ½ miles of rail into trail for MVC
Example: Kennecott Rail Relocation
Example: Kennecott Rail Relocation
How did CMGC Improve MVC R/W Process?

- Allows DOT to prioritize acquisition schedule to match the Contractor’s actual construction schedule & sequencing
- Allows owner to involve the contractor in ROW solutions
- Increased Flexibility
- Risk Retirement and Reinvestment in Future Segments
Risk Reduction and Reinvestment

- Owner Held Risk Budget
  - Construction Year 1: $75 M
  - Construction Year 2: $75 M
  - Construction Year 3: $75 M

- Diagram showing Risk Budget, Realized Risk, and Reinvestment for each year.
Example: West Ridge Golf Course

- 18 hole municipal golf course
- Alignment impacted back 9
- Challenge: Find a solution to restore functionality of 18 hole golf course
- Hired golf course architect
- Worked with City to purchase replacement property
New Golf Course Layout
“The Ridge” After Construction
Example: USANA Amphitheater

- 20,000 seat amphitheater
- Existing capacity of 6,535 parking stalls over 67.5 acres
- Impacted 16 acres (23%) and 1500 stalls (22%)
- “Failure is not an option”
- Restore parking stalls & acres all within walking distance
- 26 meetings and multiple engineering layouts
Example: USANA Amphitheater
Example: Utility Corridor

- Two 345 kV transmission lines, one 138 kV line
- Two 36” natural gas pipelines
- Relocate approximately 1.5 miles of utility corridor
- Condemn?
- Solution: Functional Replacement
- Required relocation of 40 homes
Example: Hunter High School Soccer Field

View to the north*
Soccer Fields After Utility Corridor Relocation
Example: Hillside Elementary Playground Restoration
Hillside Elementary Playground
Hillside Elementary Mitigation
Hillside Elementary – New Playground with MVC/RMP
Example: Acquisition of Remaining 96 Homes
Bank Owned (Properties 2012)

Bank-owned properties, Salt Lake Tribune, May 2012

SALT LAKE COUNTY

MVC- Salt Lake County
Example: Moving North of 5400 South
Animal Rescue Relocation

- Residential Relocation

1,062 Animals: 127 Snakes (10 rattlesnakes), 20 Tarantulas, 24 scorpions, 8 frogs, 16 toads, 458 turtles, 12 large tortoises, 5 birds, 20 lizards, 1 skunk, 3 alligators, 8 raccoons, 3 coyotes, 2 foxes
SME Steel (Before Construction)
Example: SME Steel (After Construction)
Example: Hexcel Expansion
Example: Hexcel Expansion
Get Information

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