

11/18

ARCO MURRAY

- ArchE Alums

- Shajee Tameel PT (Dallas) CE 2021
- Chase Russell PT (Dallas) AE 2021
- Paul Wagner P (Austin) AE 2015

ARCO MURRAY

- Design-Build contracting Firm

"Design-Build" vs. "General Contracting"

↓
more sophisticated
greater tech-in

- 1992 in St. Louis → 31 offices 2022

- Build: Not: high-rises, schools, public intr.

ACE team: Ag. Control, Team.

Niche Industries:

- All TOP Golf, Andretti

- Project Carlsbad - DHL (DFW)
- ALSCO (Kyle)
Industrial laundry
- NorthGate Storage (Austin)

"Design-Builds"

2 Design + Constr is one team

→ single point of contact

→ innovative solutions

→ faster timelines

→ lower overall cost

⇒ client protection (lump-sum price)

higher risk for ARCO

scope of work must be

DEFINABLE

For time saving to occur in

Design-Build vs. Plan Spec

Bridge gap in cost.

In-house service:

- Pre-cons'n & Devel't
- AME Interior Design, Civil, Str. Electrical
- Process

Project Management

→ Project handled

Responsibilities:

- customer Rel's / Buss. Dev't
- training
-
- etc.

Manage Project From Concept → comp.

Preconst. Design Const. Post Construction

Energy modeling case study

↳ Vista Self Storage

What is "Energy modeling"?

→ software simulation of
energy performance

Performance vs Prescriptive methods

↳ each component ←
↳ Building as a whole
must perform

metrics: IECC & ASHRAE

energy code: meet standard

From creek
traditionally

↳ Both allow for usage of
performance or method

→ ASHRAE is easier
only req's project to be
better in energy cost

→ IECC reqs project to
be better in energy cost by
15%.

FAM check comparison

→ US DOE energy compliance table

VISTA self-storage (San Diego)

• will better interior lighting help
offset reduced wall & roof insulation
for the overall Bldg?

IESVE Steps:

- construction geometry
- create envelope
- assign constr.
- MEP
- general Baseline
- analyze unmet hours.

\Rightarrow 200 k savings (40% energy savings)

Case study 2:

ARCO site ops + Due Diligence

Budget { 2 Bldg totaling 178 500 SF
cut vs Till to level
 \rightarrow 74 500 CY spoils export
@ \$10/CY = \$745,000
 \rightarrow 26,600 sq.ft retaining wall

As Proposed { \Rightarrow 0 CY spoils export = \$0
 \Rightarrow 5 300 SF retaining wall

orig	= \$65 / SF	}	savings: \$17 / SF
ARCO	\$48 / SF		