



# Evolving Opportunities in the Electrical Industry: Why Start Doing Integrations

*Ron Clarkson*



# Introduction

I started my career in the construction industry in 1991, initially joining the IBEW. Over the past 32 years, I have influenced the way people see Low Voltage scopes of work. I have developed the skills in all responsibilities to lead the Special Systems, Highway, Aviation, and Transit groups for Rosendin since 2004.

Since Starting in 2004, I have grown my groups to over \$100 million a year in Northern CA and is currently expanding nationwide. My responsibilities as Operations Manager include resource allocation, training, safety monitoring, improvement, hiring, customer relations, customer development, estimating, procurement, pre-construction services, and all operations. I have worked closely with the field on installation procedures and methods to improve and document install rates for all tasks.

I'm responsible for Rosendin's success on a wide range of Design-Build projects all over the US within commercial, transit, hospital, airports, educational, and homeland security. These projects involve Bridges, Tunnels, Ports, Aviation, Smart highways, Structured cabling, Air Blow Fiber - both Micro and conventional, PON, Smart Buildings, and installation and integration of many systems. I support my cutting-edge teams from conception to implementation and post-installation.

# Special Systems Leadership

- Installer from Apprentice up
- Project Manager
- Designer
- Business Development
- Coach/Teacher/Trainer
- Procurement
- Estimator
- QA/QC
- Playbook
- Growth
- Resources Recruitment
- NECA
- Task Force
- EIA/TIA
- BICSI

# Agenda

- Starting Point
- Types of Projects
- Why Integration?
- Types of Systems
- One Hand to Shake
- Resources and Intelligence
- Fun Exciting and Unique
- What Does Success Bring
- Contract Values
- Staffing
- Overhead
- Profits

# The Starting Point

- Structured Cabling Projects
- Competition and Scopes (not one size fits all)
- Market Type
  - Hospitals
  - Education
  - POS/Retail
  - Residential
  - Transportation
  - Commercial
  - Top 100 Companies
  - DATA centers/mission critical
  - Government
  - Renewables
- Resources/Minimal Training
- Profits Less Profitable and Smaller Projects/Bonding
- Great Starting Point for Low-Voltage or Electrical Contractors

# Types of Projects

- Plans and Specs Started Here  
No Control and Zero Input to Cost Management
- Design Assist Progressed to Assist Roles  
Little Control Over Design and Cost Management
- Design - Build Progressed to Design – Build  
Target Budget and or GMP Type More Control
- **Progressive Design - Build Preferred**  
**100% Control Over the Design and Cost**



# Why Integration?

- Customers Requested It
- No Competition with IBEW Contractors
- Project Labor Agreements in Place
- Substantial Jobs with Chunks of Scope
- Recession Proof
- Long Fuse Type of Projects
- Multi-Year Projects
- Day 2 Service Contracts Available
- Once in, you never leave
- Highly Profitable
- High Win Percentage
- We are Proficient at it and Have the Intelligence in House
- Competitive
- Fun and exciting scopes

# Types of Systems to Consider

- Access Control
- CCTV
- Intrusion Detection
- PA /Mass Notification
- Sound Masking
- Digital Displays
- View Glass
- Parking Systems
- POE+ lighting
- Analytic Censors
- Electrical Scopes
- Smart Restrooms
- Network/Servers
- Telephony
- High Density WIFI
- Way Finding
- AVDGS
- Train Control
- Occupancy System
- Smart Buildings BMS/BAS
- SCADA Collection Systems
- PON



# One Hand to Shake

- Control
- Union Job
- Schedule
- Playbook
- Economy of Scale, Savings, Competitive
- Working in the Same Space
- Safety, PM, QA/QC, Field Leadership
- Proven Track Record
- One Team Approach
- A Great Story for Future Projects

# Resources and Intelligence

- Design Engineering
- CAD and Production
- BIM
- Constructability Means and Methods (Playbook)
- Field Intelligence/Training
- Certifications
- Systems Programming
- QA/QC
- Commissioning
- Testing

# Fun, Exciting and Unique Projects

- Challenging and Diversified Projects
  - Ballistic Missile Defense Project DOD,
  - Bridges, Tunnels, and Smart Highways
  - Airports
  - Transit Projects High Speed, Freight, and Light Rail
  - Shipping Facilities, Ports, and Air Freight
  - Stadiums, Arenas, Mega Malls, and Outdoor Live City
  - Retail and Grocery Stores
  - Educational Labs and Training Centers
  - Research MBARI Marine Life
  - Mega Campus
  - High Rise Residential
  - Renewables
  - Data Centers

# What Does Success Bring?

- New Opportunities
- Forever Relationships
- Unmatched Resume
- Seasoned and Unified team
- Can do Approach
- Sustainability/Longevity
- Enormous and Grueling Projects
- Easier Sale
- Savings on Recruiting
- Easier Mentor Program and Support Subs

# Contract Values

- Structured Cabling 5% to 10%
- Reno Airport \$150 Million – 500,000 Square Foot
- Stadium \$110 Million and up - 60 Seats
- Transit Projects \$25 Million to \$510 Million
- Mega Campus \$35 to \$165 Million
- Service Contracts \$550K to \$5 Million a Year
- Design Services \$5 Million to \$15 Million a Year

# Staffing

- Job Must Pay the Toll
- Design Staff of (8) per Job
- Estimating Staff (1) per Job
- SRPM, PM, APM and Staff (4) per Job
- Accountant (1) per Job
- QA/QC (2) to (4) per Job
- Commissioning Agent (2)
- Systems Integrator (2) per System
- Superintendent (1) per Job
- GF and F (6) per Job
- Project Executive (1) per Job



# Overhead

- Divisional Overhead \$2 Million to \$9 Million
  - Safety
  - IT Costs
  - Executive Management
  - Estimating
  - Purchasing
  - Training
  - Entertainment
  - Business Development
  - Support Percentage HR, Training, Engineering, Estimating,
  - Home Office, Overhead Building, and Fleet

# Profits

- Structured Cabling Projects 10% Gross
- Plans and Specs 10% to 12% Gross
- Aviation Systems Design Builds 30% Gross
- Transit Projects 15% to 30% Gross
- Divisional Returns on 100 Million 20% Net
- Divisional Returns on Aviation 25% Net
- Compensation and Maximized Bonuses

# San Francisco International Airport





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# SFO Phase 1 Ductbank



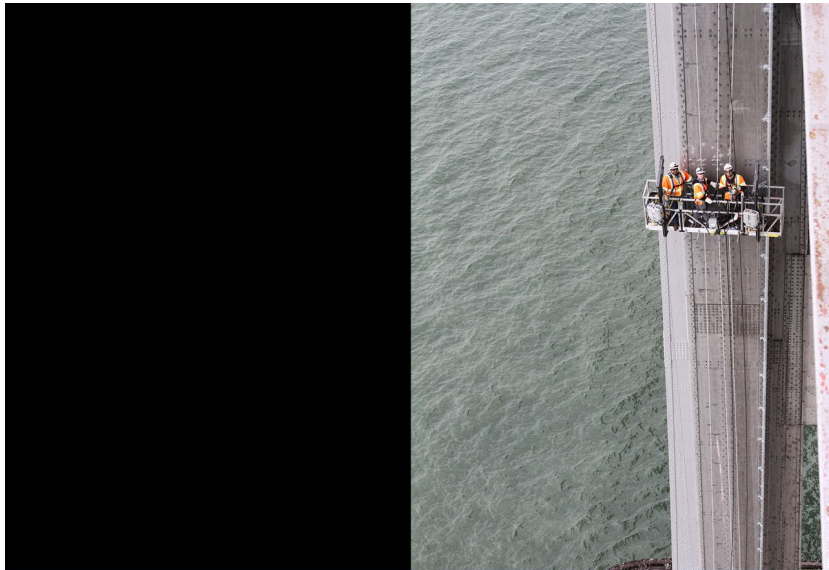
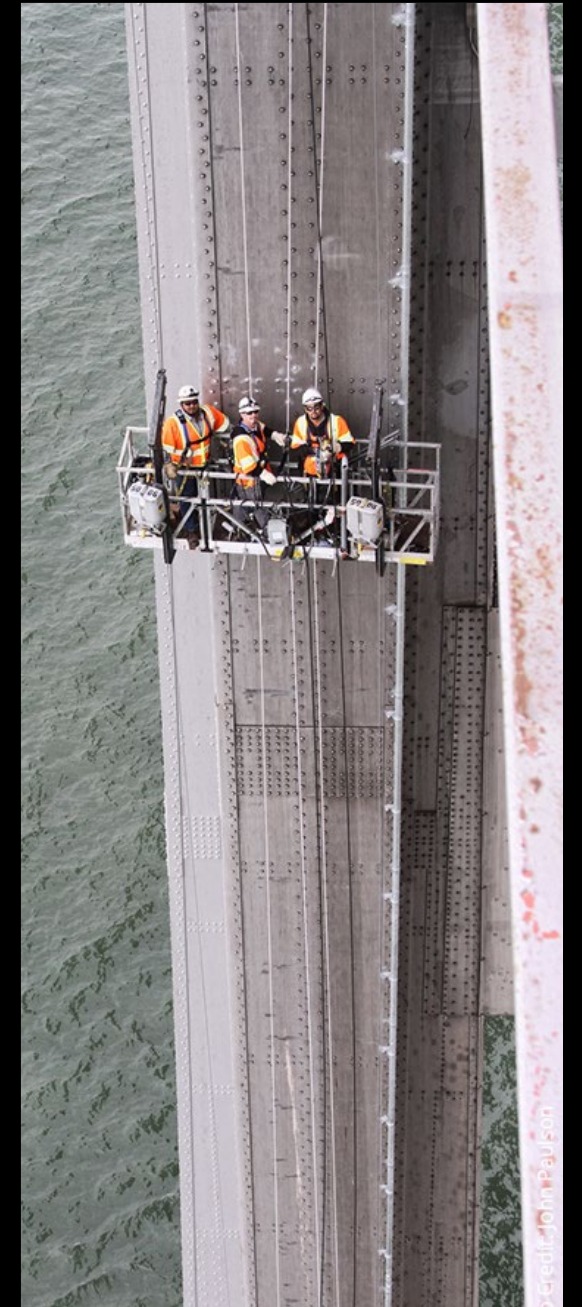


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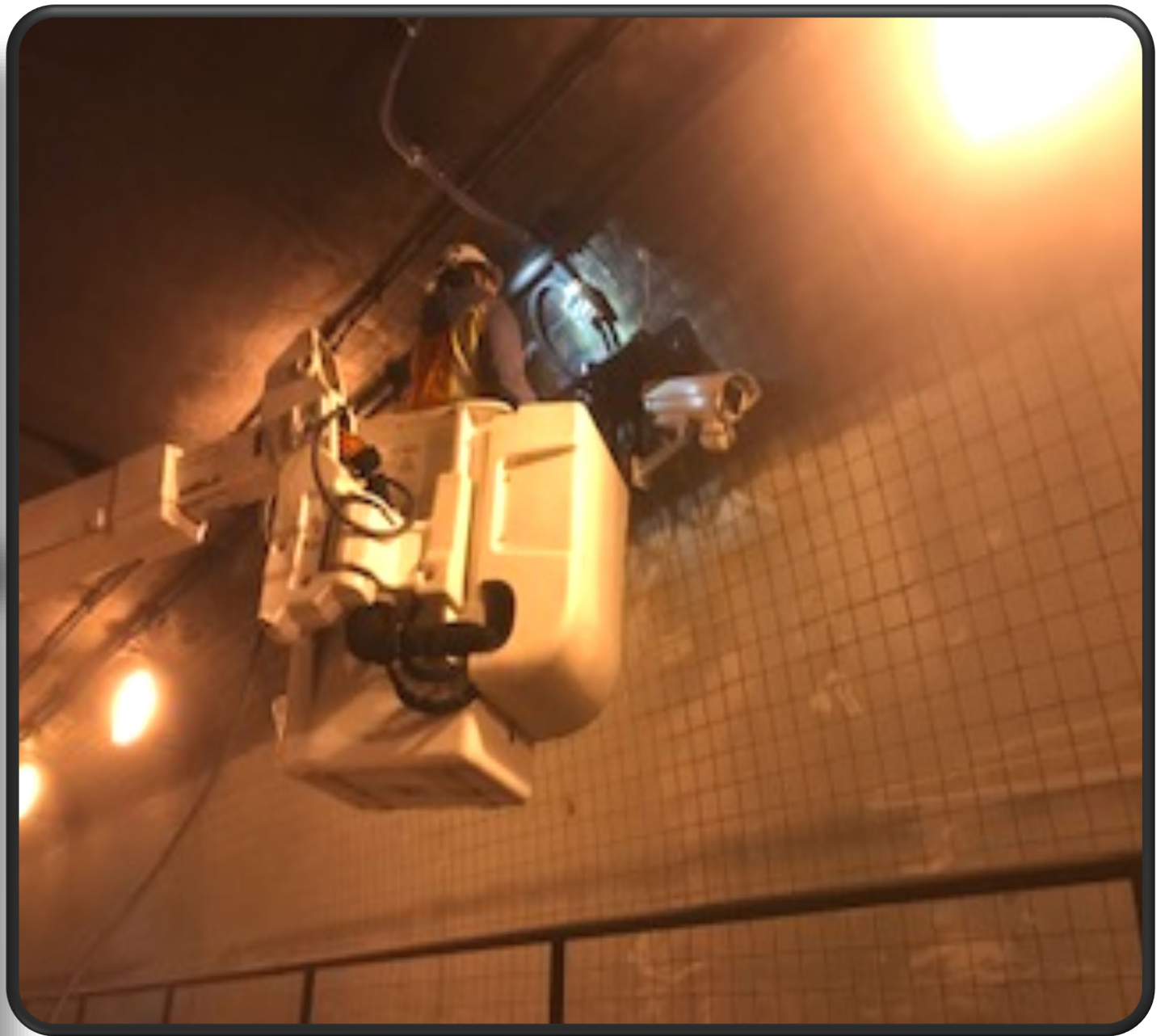


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